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2000 ANNUAL MONITORING REPORT

WASTE DISPOSAL, INC. SUPERFUND SITE SANTA FE SPRINGS, CALIFORNIA

Prepared for

United States Environmental Protection Agency

Prepared by

TRC

Irvine, California

Representing

Waste Disposal, Inc. Group (WDIG)

Project No. 30747 (94-256) February 2002

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1.0 INTRODUCTION

1.1 INTRODUCTION AND PURPOSE

- 1. This 2000 Annual Monitoring Report provides a summary and evaluation of the soil gas, ground water, in-business air and stormwater monitoring data collected by the Waste Disposal, Inc. Group (WDIG) during the 2000 calendar year at the Waste Disposal Inc. (WDI) Superfund Site (Site) in Santa Fe Springs, California. This report is required under the Amended Statement of Work (SOW) of the Amended Administrative Order, Docket No. 97-09, for the Soil and Subsurface Gas Operable Unit at the Site (EPA, 1997a and 1997b). It has been prepared to meet the following objectives:
 - Summarize the soil gas, ground water, in-business air and stormwater data collected during 2000 by WDIG.
 - Evaluate the data as to trends or other observations.
 - Provide a formal transmittal of laboratory and Quality Assurance/Quality Control (QA/QC) data to the United States Environmental Protection Agency (EPA).
 - Present recommendations for reductions in the monitoring programs.
- 2. The following monitoring plans are proposed:
 - Vapor Well Monitoring
 - VW-25, -29 through -39, -41, -42 and -56 will be sampled and analyzed semiannually for VOCs using EPA Method TO-15 and TNMO using EPA Method 25C.
 - VW-46, -49, -51, -58, -61 and -62 will be sampled and analyzed quarterly for VOCs and TNMO.
 - Remaining wells will be field monitored quarterly and any wells that exceed EPA-approved criterion will be sampled and analyzed.
 - Ground Water Well Monitoring
 - GW-01, -02, -11 and -32 will be monitored quarterly as background wells.
 - GW-22, -23, and -26 will be monitored quarterly as point-of-compliance wells.
 - GW-10 and -33 will be monitored quarterly as near-source detection wells.
 - GW-27, -29 and -30 will be monitored quarterly as verification wells.

These wells will be analyzed for VOCs and general chemistry parameters.

- In-Business Monitoring at the following locations:
 - 12635E Los Nietos Road (IBM-03).
 - 12811F Los Nietos Road (IBM-41).
 - 9843 S. Greenleaf Avenue (IBM-50).
 - 12633 Los Nietos Road (IBM-03B).
 - 12637A Los Nietos Road (IBM-24B).
 - 12803 Los Nietos Road (IBM-37).
 - 9620 Santa Fe Springs Road (IBM-21).
 - 9630 Santa Fe Springs Road (IBM-22).

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- 9640 Santa Fe Springs Road (IBM-28).
- 12747 Los Nietos Road (IBM-32).
- Reduction from Level 4 to Level 2 laboratory QA review.
- The remaining chapters of this report are organized as follows:
 - Chapter 2.0 Project Background
 - Chapter 3.0 Sampling and Analysis Methods
 - Chapter 4.0 Monitoring Results and Data Evaluation
 - Chapter 5.0 Quality Assurance/Quality Control Chapter 6.0 Conclusions and Recommendations

 - Chapter 7.0 References

2.0 PROJECT BACKGROUND

The Site is located in Santa Fe Springs, Los Angeles County, California on an
approximately 38-acre parcel of land. It is currently bordered on the northwest by Santa Fe
Springs Road, on the northeast by the former Fedco Distribution Center and St. Paul High
School, on the southwest by Los Nietos Road, and on the southeast by Greenleaf Avenue
(Figure 2.1).

2.1 GENERAL SITE HISTORY

1. Extensive Site history information is available in previous documents (e.g., Final Remedial Investigation [RI] Report, EBASCO, 1989; Predesign and Intermediate [60%] Design Report, Soils and Subsurface Gas Remedial Design, Environmental Solutions, Inc., 1995; Remedial Design [RD] Investigative Activities Summary Report (Rev 2.0), TRC, 2001).

2.2 SUMMARY OF PRIOR INVESTIGATIONS

2.2.1 SOIL GAS CHARACTERIZATION

- 1. Soil gas investigative activities were conducted during 1997 and 1998, under the RD Investigative Activities Workplan (TRC, 1997a) and the Gas Contingency Plan (EPA, 1997b). Activities included geoprobe soil gas screening, two soil gas monitoring rounds, in-business air monitoring, the installation of 32 additional vapor wells by WDIG and the EPA in 1998 and completion of 12 soil gas monitoring rounds from 1998 to 2000. Figure 2.2 shows the complete vapor well monitoring network. Table 2.1 provides a summary of the network parameters, including construction details.
- 2. Primary objectives of the soil gas characterization activities were:
 - Determine current soil gas conditions in the following areas:
 - Site perimeter.
 - Adjacent to onsite structures.
 - Site interior.
 - Determine trends in the historical data.
 - Evaluate if other compounds that have currently not been assigned Site-specific action levels may pose a Site risk.
- 3. Interim Action Levels (IALs) for benzene and vinyl chloride established as part of the Subsurface Gas Contingency Plan and the Amended Administration Order Docket 97-09, are

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based on the potential migration of subsurface gas into onsite businesses. A more detailed description of the rationale for these IALs is provided in the Subsurface Gas Contingency Plan and the Amended Administrative Order (EPA, 1997a and 1997b).

- 4. To address the risks from methane, EPA used the California Integrated Waste Management Board's (IWMB) methane action level in buildings as their criteria:
 - Methane levels in buildings will be below 1.25 percent (i.e., 25 percent of the methane lower explosion limit of 5 percent).
 - Subsurface methane levels at the Site boundary must be below 5 percent based on IWMB requirements. An ITSL of 1.25 percent was used by EPA in evaluating the results of the Subsurface Gas Contingency Plan Investigations Report (CDM Federal, 1999b).
- 5. Table 2.2 provides a summary of the soil gas and indoor air ITSLs for the Site COCs. The table was reproduced from the Subsurface Gas Contingency Plan Investigations Report (CDM Federal, 1999b). As part of the Soil Gas Contingency Plan work, referenced in paragraphs 1 and 2 of this section, EPA developed ITSLs for the chemicals determined to present potential health risks based on chemical toxicity and relative concentrations at the Site.

2.2.2 GROUND WATER CHARACTERIZATION

- 1. As part of the RI/FS process, 27 ground water wells were installed at the Site, with the majority of the wells screened at 1988 water table elevations. A few wells extended to about 50 feet below the water table.
- 2. During irregularly spaced monitoring rounds from November 1988 through September 1997, the following ground water conditions were observed:
 - TCE and PCE exceeding MCLs are found in wells located in the western portion of the Site.
 - Light nonaqueous phase liquids (LNAPL) and dense nonaqueous phase liquids (DNAPL) have not been observed in the ground water samples.
 - Primary metals (i.e., arsenic, chromium and lead) have been detected at low concentrations with isolated sampling rounds exceeding MCLs. These concentrations were observed in upgradient, crossgradient and downgradient wells at the Site.
 - Elevated concentrations of aluminum, iron, manganese and selenium reflect a regional ground water condition, not a Site-specific condition.



- 3. Table 2.3 provides a summary of the well type, screen interval and depth to ground water (November 2000) and the location of the monitoring wells relative to the waste sources. Figure 2.3 shows the location of the wells.
- 4. CDM Federal concludes in their Ground Water Data Evaluation Report that significant impacts from the WDI wastes on ground water quality have not been identified based on available data. Several Site chemicals of concern (VOCs and metals) have been detected above the MCLs. However, these exceedances do not appear to be related to site waste based on distribution in ground water (i.e., some contaminants are detected upgradient or laterally away from WDI waste sources.)

2.2.3 IN-BUSINESS AIR CHARACTERIZATION

- 1. Based on results from site investigations, EPA directed WDIG to perform indoor air sampling of buildings adjacent to the buried waste near locations with elevated soil gas VOCs and/or methane levels. Refer to Figure 2.4 for in-business air sampling locations. The in-business air sampling was initiated in February 1998. The SOW initially required monitoring of businesses on a monthly basis. Results from the first 3 months of monitoring indicated that soil gas infiltration was not occurring. Based on those results, monitoring was reduced to quarterly, concurrent with the vapor well monitoring program, which continued through 2000.
- 2. The objective of in-business air monitoring is to assure that soil gas from the Site is not infiltrating into onsite buildings.

2.2.4 STORMWATER CHARACTERIZATION

- 1. The stormwater pollution prevention plan (SWPPP) (TRC, 1998) has two major objectives. The first is to identify existing and potential sources of pollution at the Site. The second is to propose and implement the necessary practices that will reduce the introduction of potential pollutants into stormwater discharges associated with the Site.
- 2. The SWPPP was designed to cover the undeveloped areas of the Site (Areas 2, 3, 4 and 7). The remaining areas (Areas 1, 5, 6 and 8) have existing or abandoned light industrial business, which are responsible for their own stormwater management practices.

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3. Initially, a total of 5 stormwater monitoring points were designated. However, after regrading of the Site in October 1998, three monitoring points have been designated as shown in Figure 2.5.

3.0 SAMPLING AND ANALYSIS METHODS

1. As required by EPA, a Field Sampling and Analysis Plan (FSAP) (TRC, 1997c) and Quality Assurance Project Plan (QAPP) (TRC, 1997d) were generated to support the monitoring activities.

3.1 SOIL GAS

- 1. Samples were collected and delivered to a state-certified laboratory, via courier, and analyzed using the methods noted below.
- 2. As required by the FSAP (TRC, 1997c) and QAPP (TRC, 1997d), field blanks and field duplicates were collected as required. The frequency and type of QA/QC sampling is discussed in Chapter 5.0.
- 3. Organic analyses of the vapor well samples (including quality control [QC] samples) were performed by Performance Analytical, Inc., Simi Valley, California. These samples were collectively analyzed for volatiles by EPA Method TO-15 and for methane and total gaseous nonmethane organic compounds (TGNMOC) by EPA Method 25C using either a flame ionization detector (FID) or a thermal conductivity detector (methane only).

3.2 GROUND WATER

- 1. Samples were collected and delivered to a state-certified laboratory via courier and analyzed using the methods noted below.
- 2. As required by the FSAP (TRC, 1997c) and QAPP (TRC, 1997d), field blanks and field duplicates were collected as required. The frequency and type of QA/QC sampling is discussed in Chapter 5.0.
- 3. Laboratory analyses of the ground water samples (including QC samples) were performed by Del Mar Analytical, Irvine, California. VOCs analyses were performed using EPA Method 8260A. Semi-volatile organic compound (SVOC) analyses used EPA method 8270 and metals were analyzed using EPA Method 6010.



3.3 IN-BUSINESS AIR

- Time-weighted indoor air samples were collected over a 24-hour period. The samples were retrieved from the buildings prior to business opening and delivered to a state-certified analytical laboratory for analysis.
- As part of this program, various QA/QC samples were collected. These included field blanks
 and duplicates. In addition to the field QA/QC requirements, the laboratory also included
 laboratory control samples, method blanks and matrix spikes to comply with the QAPP
 requirements.
- 3. Organic analyses of the in-business air samples (including QC samples) were performed by Performance Analytical, Inc., Simi Valley, California. Samples were collectively analyzed for volatiles by EPA Method TO-15 and for methane and total gaseous nonmethane organic compounds by EPA Method 25.1 using either an FID or thermal conductivity detector (methane only).

3.4 STORMWATER

- During significant rainfall events, site inspections were performed to assess availability of
 runoff for collection of stormwater samples. Since the regrading of the site in 1998, runoff
 occurs primarily as sheetflow. Sandbags are placed at three locations to create sites for
 collection of stormwater samples. During 2000, only the monitoring point at the south corner
 of Area 2 (Figure 2.5) had sufficient flow to enable collection of a stormwater sample. The
 other monitoring locations did not produce enough runoff for sampling.
- 2. Samples are collected from liquids accumulated behind the sandbags. All samples are placed in an ice chest at 4 degrees Celsius for transportation to a state-certified laboratory.
- 3. Laboratory analyses of the stormwater samples were performed by Del Mar Analytical, Inc., Irvine, California. Analyses includes:
 - Total Recoverable Oil and Grease (EPA 413.2)
 - Total Recoverable Metals (EPA 6010B/7470A)
 - pH (EPA 150.1)
 - Specific Conductance (SM 2510B)
 - Total Suspended Solids (EPA 160.2)

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4.0 MONITORING RESULTS

- 1. Data provided in this report for soil gas, ground water and in-business air are based on four quarters of sampling events (February 2000 through November 2000) and were collected using the procedures referenced in Chapter 3.0.
- 2. Stormwater sampling data is based on one sample collected in February 2000.

4.1 SOIL VAPOR MONITORING RESULTS

- 1. Results of the field monitoring discussed in Section 3.1 are provided as a database in Appendix A.
- 2. Table 4.1 provides a summary of the sampling frequency of the vapor well network. Table 4.2 provides a summary of the critical wells in each area of the Site during 2000. A critical well is defined as a well that has had ITSL exceedances during the past 2 years. Figures 4.1 through 4.5 show the 2000 analytical data by area. Table 4.3 is a summary of trend data for selected vapor wells. Appendix B contains figures showing the 1998 and 1999 historical analytical results by area. The 2000 laboratory reports and supporting Quality Assurance (QA) documentation are provided in Appendix C on CD-ROM.
- 3. Except for the wells in Table 4.2, the other vapor wells did not show ITSL exceedances and there have not been significant changes in their gas concentration levels from 1999 to 2000.
- 4. Conclusions drawn from the monitoring program are presented in Section 6.0.

4.2 GROUND WATER MONITORING RESULTS

- 1. Since September 1997, WDIG has been performing quarterly sampling of the ground water monitoring well network at the Site. The Reduced Ground Water Sampling Program was approved by the EPA and initiated in January 1999.
- 2. Monitoring in November 2000 shows the depth to ground water at the Site ranges from approximately 35 feet bgs (GW-02) to 56 feet bgs (GW-24). Table 2.3 shows ground water depths measured at the Site during November 2000. Figures 4.6A through 4.6C show historical ground water elevations at the Site since October 1988. Ground water elevations appear to be in a downward trend with elevations being 2 to 4 feet lower in November 2000 in comparison with October 1999.



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- 3. Ground water beneath the Site flows to the south and southwest. Refer to Figures 4.7 to 4.10 showing the ground water contour maps for the 2000 monitoring period.
- 4. Figures 4.11 through 4.13 show the 2000 analytical data. Table 4.4 shows the ground water wells with MCLs exceedances in 2000. Table 4.5 is a summary of trend data for selected ground water wells. Appendix B contains figures showing the 1998 and 1999 historical analytical results by area. The 2000 laboratory reports and supporting QA documentation are provided in Appendix C on CD-ROM.

4.3 IN-BUSINESS AIR MONITORING RESULTS

- 1. Data provided in this section were generated from the four in-business air sampling events performed concurrently with the vapor well monitoring. Samples were collected using procedures referenced in Chapter 3.0 and as indicated in the Subsurface Gas Quarterly Monitoring Plan and relevant FSAP and the QAPP documents.
- 2. Eight onsite locations were monitored during 2000. Table 4.6 shows the frequency of sampling for each location. Due to scheduling difficulties on the part of the business owners, mainly because of the inconvenience of weekend sampling, not every location could be sampled during each monitoring episode. Some monitoring locations such as IBM-03B and IBM-38 were monitored in 1999, but not in 2000. Results of the 2000 laboratory analyses are shown in Figure 4.14. Results of field monitoring activities and the laboratory analytical reports are provided in Appendix C on CD-ROM.
- 3. Table 4.7 provides a summary of ITSL exceedances for in-business air monitoring for Areas 2, 5, 7 and 8 that occurred in 2000. These exceedances can be attributed to business activities as shown in Table 4.7. Table 4.8 provides a summary of selected constituents for each sampling event conducted at the Site since 1998.

4.4 STORMWATER MONITORING RESULTS

1. Table 4.9 shows the stormwater analytical data gathered at the Site. The data indicates that stormwater flow from the Site in 2000 was not being impacted by surface conditions or fill soil.

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5.0 QUALITY ASSURANCE/QUALITY CONTROL

1. Soil gas, ground water, in-business air and stormwater sampling activities were conducted in accordance with the FSAP (TRC, 1997c) and QAPP (TRC, 1997d).

5.1 DATA VALIDATION RESULTS

- 1. Ten percent of the samples collected during 2000 were validated by Environmental Standards, located in Davis, California. Based on the QA review of Level IV deliverables with regard to holding times; blank analysis results; surrogate recoveries; laboratory and field duplicate precision; calibrations; retention time windows and shifts; laboratory control sample (LCS) recoveries; internal standard recoveries, analytical sequence and instrument sensitivity, this data meets the general requirements for compliance, accuracy and precision.
- 2. Overall, the organic data quality for this data set was good. Reporting requirements were met for the data sets. It should be noted that the data issues discussed below are clerical in nature and do not necessarily affect data usability. Results shown in Table 5.1 indicate that the data met general QA/QC requirements for critical elements, and therefore, the data are considered useable.
- 3. With regard to data usability, the principal areas of concern include blank contamination, field duplicate precision, results exceeding the calibration range of the instrument, calibration issues, internal standard areas, low but acceptable precision between sample duplicates and quanitation of results below the quanitation limits. It should be noted that the following data usability issues represent an interpretation of QC results for the project samples. Quite often, data qualifications address issues relating to problems associated with the sample matrix. Similarly, the validation guidelines routinely specify areas of the data that require qualification for which the analytical methods applied do not require corrective action by the laboratory.
- 4. A copy of the data validation reports for the soil gas monitoring, ground water monitoring and in-business air monitoring conducted during 2000 is included in Appendix C on CD-ROM.



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6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 MONITORING RESULTS CONCLUSIONS

6.1.1 SOIL GAS MONITORING RESULTS

- 1. The data presented in Section 4.1 indicate areas exceeding the California Integrated Waste Management Board (CIWMB) regulations for methane or the ITSLs established by EPA. Consistent exceedances of the ITSLs during the past 2 years were considered in identifying these areas, including proximity to several onsite buildings in Areas 5 and 8. Using the ITSLs for the Site boundary, the following areas with verified exceedances have been identified:
 - Reservoir
 - Northwest corner of Area 2 (RV storage lot)
 - 12637B Los Nietos Road (Area 2)
 - West of 12637B Los Nietos Road (Area 1)
 - 9843 Greenleaf Avenue (Area 5)
 - Northeast portion of Area 8
 - Area 8 near the auto storage yard
 - Southwest portion of Area 8
 - Central portion of Area 7

The ITSLs and the COCs used for this evaluation are preliminary and may be revised when the final action levels and COCs are determined by EPA.

2. These areas of verified exceedances will be adequately covered by the RCRA-equivalent cap and bioventing system as part of the remedial closure.

6.1.2 GROUND WATER MONITORING RESULTS

- 1. Several Site COCs (TCE, PCE, Antimony, Iron, Manganese, Mercury, Selenium and Thallium) have been detected above their respective MCLs in the ground water samples. These exceedances do not appear to be related to Site wastes based on their distribution in ground water (i.e., some contaminants are detected upgradient or cross-gradient from WDI waste sources and at the shallow depth in an upgradient well [GW-01]). A deep upgradient well (GW-32) was installed in January 2001 and will be included in the 2001 monitoring program as approved by EPA.
- 2. VOCs detected in ground water samples are primarily PCE and TCE with concentrations in several locations that are above their respective MCL of 5 μ g/L for primary drinking water. These VOCs have been detected in the western part of the Site in both upgradient and deep monitoring wells.

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- 3. Based on ground water flow conditions, the distributions of detections, and information on offsite ground water contamination sites, sources of PCE and TCE detected in the western portion of the Site appear to be from solvent releases associated with offsite upgradient industrial sites.
- 4. Measured concentrations of VOCs dissolved in ground water have never exceeded 100 μg/L or 1,000 μg/L for potential LNAPL/DNAPL constituents, respectively. Therefore, because the ground water beneath the Site does not contain dissolved solvents exceeding 1,000 μg/L, and an oily sheen has not been observed in ground water samples, it can be concluded, at present, that LNAPL or DNAPL sources are not contributing to ground water contamination at the Site.
- 5. The Ground Water Data Evaluation Report (CDM Federal, 1999a) concluded that significant impact on ground water has not been identified from the Site based on available ground water sampling results with the location and characteristics of the waste sources at the Site. WDIG concurs with this conclusion since data collected by WDIG from September 1997 through November 2000 are consistent with CDM Federal's evaluation.

6.1.3 IN-BUSINESS AIR MONITORING RESULTS

- 1. Results of the in-business air monitoring indicate the following:
 - Methane did not exceed ITSL in the onsite structures during 2000. Therefore, this shows that soil gas is not migrating into the buildings.
 - ITSL exceedances:
 - Benzene ITSL exceedances have been observed in some of the in-business air monitoring samples. However, these exceedances can be attributed to sources not related to the Site (i.e., use of VOC containing materials related to business practices, vehicle exhaust, etc.).
 - Other ITSL exceedances:
 - Acetone exceedances were found in IBM-03 and IBM-24. However, both these businesses use acetone routinely.
- 2. In-business air samples were collected during nonbusiness hours to assure that conditions reflected the worst exposure conditions (i.e., no ventilation, closed doors, no business activity, etc.). Based on field and analytical results, soil gas conditions at the Site do not appear to present a risk to in-business workers.

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6.1.4 STORMWATER MONITORING RESULTS

1. Stormwater monitoring performed in 2000 indicates that stormwater flow from the Site was not being impacted by surface conditions or fill soil.

6.2 RECOMMENDATIONS

1. We propose to change from Level 4 to Level 2 QA/QC data validation. The Remedial Design Investigative Activities Summary Report (Revision 2.0) and the Supplemental Feasibility Study (Revision 4.0) were both recently approved by EPA and the Site is expected to move into remedial construction in 2002. The Level 4 data validation has shown that the analyses performed to date resulted in usable data. Hence, a reduction from Level 4 to Level 2 is appropriate at this time.

6.2.1 VAPOR WELL MONITORING PLAN

- 1. In order to determine if a well that is being field monitored should be sampled, a "decision point concentration" criterion for total VOCs and methane was developed for each well. Recommend continuing to follow the criterion developed by the EPA.
- 2. The following vapor well monitoring plan is proposed:
 - Vapor Wells VW-25, -29 through -39, -41, -42 and -56 will be sampled and analyzed semiannually for VOCs using EPA Method TO-15 and TNMO using EPA Method 25C. This is part of the soil gas monitoring program approved by the EPA in February 2001.
 - Vapor Wells VW-46, -49, -51, -55, -58, -61 and -62 will be sampled and analyzed quarterly. These wells will also be analyzed for VOCs and TNMO using the EPA Methods mentioned above.
 - The remaining wells will be field monitored quarterly and any wells that exceed the EPA-approved criterion will be sampled and analyzed.
- 2. The following wells were approved for quarterly sampling and analysis in February 2001. We propose that they be changed to quarterly field monitoring for the following reasons:
 - MP-01 Covered by VW-51
 - MP-02 Covered by VW-51
 - VW-10 No ITSL exceedances
 - VW-11 No ITSL exceedances
 - VW-13 Covered by VW-55
 - VW-14 Covered by VW-49 and -61
 - VW-18 Covered by VW-35
 - VW-22 Covered by VW-56 and -58
 - VW-27 No ITSL excedances



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- VW-28 No ITSL exceedances; covered by VW-29 and -42
- VW-44 No ITSL exceedances
- VW-45 Covered by VW-62
- VW-50 No ITSL excedances; covered by VW-31 and -32
- VW-52 No ITSL exceedances
- VW-53 Covered by VW-56
- VW-54 No ITSL excedances
- VW-57 Covered by VW-55 and -56
- VW-59 No ITSL exceedances
- VW-60 No ITSL exceedances
- VW-63 No ITSL exceedances
- 4. The vapor well monitoring reductions will not adversely affect the objectives of the vapor well monitoring program or the quality of the data collected.

6.2.2 GROUND WATER MONITORING PLAN

- 1. The following recommendations for long-term ground water monitoring at the Site were given in the Ground Water Data Evaluation Report (CDM Federal, 1999a).
 - Installation of one additional upgradient (adjacent to GW-01) monitoring well (GW-32) and one additional downgradient (southeast perimeter of reservoir boundary) monitoring well (GW-33). These wells were installed in January 2001.
 - Revised sampling plan based on ground water flow conditions and distribution of waste sources. This was implemented during the First Quarter 2001.
 - Revised list of analytical parameters and testing frequency. This was implemented during the First Quarter 2001.
- 2. In accordance with 22 CCR §66265.97, requirements for a ground water detection monitoring program include background wells, point of compliance wells, and other wells suitable for early detection of a release from the regulated waste unit. The following monitoring system is based on ground water flow conditions and the distribution of waste sources at WDI:
 - Background Wells: A minimum of one upgradient monitoring well, screened within the uppermost aquifer, is needed to monitor and document the quality of ground water that has not been affected by an onsite release. Suitable upgradient background wells are wells GW-01, -02, -11 and -32.
 - Point of Compliance (POC) Wells: A sufficient number of monitoring wells located at the POC (downgradient edge of the regulated waste unit), and screened within the uppermost aquifer, need to be monitored to detect potential release and impact to ground water from waste sources. Given the hydrogeologic conditions at WDI, shallow aquifer POC wells spaced approximately 200 feet apart would be appropriate for long-term detection monitoring. Many of the existing downgradient monitoring wells could serve as POC detection wells (e.g., GW-22, -23 and -26).



- Near-Source Detection Wells: Depending on the location and nature of waste sources, a near-source ground water detection well is appropriate for inclusion in the long-term monitoring program. GW-10 and -33 are the near-source detection wells.
- Verification Wells or Guard Wells: Depending on site closure requirements, monitoring of downgradient property-line verification wells or "guard" wells (GW-27, -29 and -30) is warranted to assure that site contaminants (if present in ground water) do not migrate offsite and potentially impact private or municipal water supply wells.
- 3. Samples collected from the WDI ground water monitoring wells should be analyzed for VOCs, as well as for general chemistry ground water quality parameters (such as chloride, sulfate, total organic carbon, pH, and total dissolved solids).
- 4. We recommend that SVOC analyses and priority pollutant metals not be performed because SVOCs have not been detected since 1997 and because metal concentrations are stable reflecting a regional condition.

6.2.3 IN-BUSINESS MONITORING PLAN

- 1. The following program was approved by the EPA on February 9, 2001:
 - Sampling locations:
 - 12637B Los Nietos Road (IBM-24).
 - 12635E Los Nietos Road (IBM-03).
 - 12811F Los Nietos Road (IBM-41).
 - 9843 S. Greenleaf Avenue (IBM-50).
 - 12633 Los Nietos Road (IBM-03B).
 - 12637A Los Nietos Road (IBM-24B).
 - 12803 Los Nietos Road (IBM-37).
 - Ambient air sample in Area 7 (IBM-24AMB).
- 2. We propose eliminating the IBM-24 and IBM-24Amb sampling locations. There have been no detections at IBM-24 location since February 1999. This building is also covered by location IBM-24B.
- 3. We propose adding sampling points at the following locations as the buildings are over waste as they will be part of the OM&M after closure:
 - 9620 Santa Fe Springs Road (IBM-21)
 - 9630 Santa Fe Springs Road (IBM-22)
 - 9640 Santa Fe Springs Road (IBM-28)
 - 12747 Los Nietos Road (IBM-32)

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- 4. Sampling occurs semiannually (during the Second and Fourth Quarters).
- 5. Use of digital electronic flow controllers, which can be installed in the businesses on weekdays, and collected during nonbusiness hours over the weekend will be implemented. This will improve tenant cooperation and reduce costs, without sacrificing data and QA/QC requirements.

6.2.4 STORMWATER MONITORING PLAN

1. Stormwater monitoring will continue at the Site until remedial activities are complete, as described in the SWPPP (TRC, 1998).

7.0 REFERENCES

CDM Federal. 1999a. Ground Water Data Evaluation Report. Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. January 14, 1999.

CDM Federal. 1999b. Subsurface Gas Contingency Plan Investigations Report. January 18, 1999.

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Environmental Solutions, Inc. 1995. Predesign and Intermediate (60%) Design Report, Soils and Subsurface Gas Remedial Design, Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. October 1995.

EPA. 1993. Superfund 1992 Groundwater Monitoring Report, Waste Disposal, Inc., Santa Fe Springs, California. 1993.

EPA. 1997a. Docket No. 97-09 – Amended Administrative Order for Remedial Design and Other Response Actions (Amending Docket No. 94-17). 1997.

EPA. 1997b. Subsurface Gas Contingency Plan. Waste Disposal, Inc. Superfund Site Summary. 1997.

TRC. 1997a. Remedial Design Investigative Activities Workplan and Comprehensive Ground Water Quality Monitoring Plan Waste Disposal, Inc. Superfund Site, Santa Fe Springs, California. August 29, 1997.

TRC. 1997b. Comprehensive Subsurface Gas Quarterly Monitoring Plan (Rev. 1.0). Waste Disposal, Inc. Superfund Site. July 1997.

TRC. 1997c. Revised Supplemental Field Sampling and Analysis Plan (Rev. 1.0). Waste Disposal, Inc. Superfund Site. October 1997.

TRC. 1997d. Revised Supplemental Quality Assurance Project Plan (Rev. 1.0). Waste Disposal, Inc. Superfund Site. October 1997.

TRC. 1998. Waste Disposal, Inc., Superfund Site Stormwater Pollution Prevention Plan (Rev.0).

TRC. 2001. Remedial Design (RD) Investigative Activities Summary Report. (Rev. 2.0).

TABLE 2.1

LIST OF EXISTING VAPOR WELLS AND CONSTRUCTION DETAILS WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

											Page 1 of 2	
	WELL	• • • • • • • • • • • • • • • • • • •		TOTAL SCREENED INTERVAL (ft) AND MATERIAL TYPE ⁽¹⁾								
LOCATION	IDENTIFI- CATION	TYPE	DEPTH (ft)	Shallow Probes	Туре	Intermediate Probes	Туре	Deep Probes	Туре	RI Probes	Туре	
Area I	VW-10	Perimeter ⁽²⁾	38		_		-	_	-	5-35	Α	
	VW-11	Perimeter	45	-		_	_	-		5-35	Α	
	VW-16	Perimeter	35	_		-		_	_	5-34	Α	
i i	VW-17	Perimeter	35			-	-	-	_	5-35	Α	
	VW-18	Perimeter	36	_	-	_		_		6-36	Α	
	VW-35	Perimeter	38	5-10	F	_	••	33-38	N	_		
	VW-36	Perimeter	30	5-10	F	-	-	25-30	N	_	_	
	VW-37	Perimeter	30	7-10	F			25-30	N	_	_	
	VW-38	Perimeter	35	5-10	F	_	_	29-34	N	_	_	
	VW-39	Perimeter	30	5-7	F	-	-	25-30	N	_		
	VW-40	Perimeter	25	5-10	F		-	20-25	N	_	-	
	VW-44	Perimeter	30	5-7	F	13-16	N	25-30	N	_	_	
	VW-46	Perimeter	30	4.5-6.5	F	12-15	N	22-27	N			
	VW-62	Perimeter	31	5-10	N	15-18	N	25-30	N	-		
	VW-63	Perimeter	29	5-8	F,S	14-18	N	23-28	N		_	
Area 2	VW-01	Interior	35		_	_	-	-		5-35	Α	
	VW-02	Interior	35		-	-	-	_	-	5-35	Α	
	VW-03	Interior	35		-	-	-	_	_	5-35	Α	
	VW-04	Interior	23	-		_	-			6-23	Α	
	VW-05	Interior	30	_		-		_	-	4-29	Α	
	VW-08	Interior	35	_	_	-		_	-	5-35	Α	
	VW-15	(3)	45	_	_			_	_	5-35	Α	
	VW-41	Perimeter	20	5-7	F	_		15-20	N		-	
	VW-42	Perimeter	30	5-10	F			25-30	N		-	
	VW-43	Interior	33	5-10	F	16-19	N	27-32	N	_	_	
	VW-45	Perimeter	30	7.5-12.5	F	18.5-21.5	N	27-30	N		_	
	VW-47	Interior	30	4.5-7.5	F	13-18	N	26-30	N			
	VW-48	Interior	35	5-8	F	12-17	S	30-35	N	_		
Area 3	VW-28	Perimeter	25	5-10	F	-		25-30	N			
Area 4	VW-06	Interior	35			-	-			4-34	A	
	VW-29	Perimeter	35	7-10	F	18-23	N	30-35	N		_	
Area 5	VW-07	(3)	36	-						5-35	A	
	VW-30	Perimeter	35	5-7	F	18-23	N	30-35	N	_	-	
	VW-51	Perimeter	35	5-8	F	13-18	S	25-30	N	-		
	MP-01	Perimeter										
	MP-02	Perimeter										
Area 6	VW-12	Interior	36.3	_		_		_		4-34	A	
	VW-31	Perimeter	35	5-10	F			25-30	N	_		
Area 7	VW-25	Interior	35	-	-	-		_		5-35	A	
	VW-26	Interior	38	_		_	-	_		5-35	Α	
l	VW-32	Perimeter	35	4.5-7.5	F	13-18	N	30-35	N	-	_	
	VW-50	Perimeter	35	5-8	F	13-18	N	30-35	N	-	_	

⁽¹⁾ Material type: F = Fill Material. S = Sump-like Material.



N = Native Material.

A = All Material (fill, sump-like and native).

⁽²⁾ Perimeter type includes wells within 100 feet of a structure, as well as perimeter wells.

⁽³⁾ Abandoned.

^{- =} Not Applicable.

TABLE 2.1

LIST OF EXISTING VAPOR WELLS AND CONSTRUCTION DETAILS WASTE DISPOSAL, INC. SUPERFUND SITE (Continued)

	WELL	TYPE	TOTAL	SCREENED INTERVAL (ft) AND MATERIAL TYPE(1)							
LOCATION	IDENTIFI- CATION		DEPTH (ft)	Shallow Probes	Туре	Intermediate Probes	Туре	Deep Probes	Туре	RI Probes	Туре
Area 8	VW-13	Perimeter	35	-		- [_		6-31	Α
	VW-14	Interior	35.5		-	-	-	-		5.5- 35.5	A
	VW-19	(3)	45	_	_	_	_	_		6-36	A
	VW-20	Perimeter	35.5	_	_	-	_	_	-	5.5- 35.5	A
	VW-21	Perimeter	36	-		-		_		6-36	Α
	VW-22	Perimeter	35	-		_	-	_		5-35	Α
	VW-23	Perimeter	36				-	_	-	6-36	Α
	VW-24	Perimeter	35							5-35	Α
	VW-27	Interior	35	6-9	F	16-19	N	28-33	N		
	VW-33	Perimeter	35	5-10	F			30-35	N		_
	VW-34	Perimeter	45	5-10	F	18-23	N	35-40	N	-	-
	VW-49	Perimeter	35	5-10	F	15-18	_F	25-30	N	2	
	VW-52	Interior	30	5-10	F	14-19	N	25-30	N	_	
	VW-53	Perimeter	30	7-10	F,S	15-20	N	25-30	N	_	
	VW-54	Perimeter	34	8-12	F,S	17-20	N	25-30	N		
	VW-55	Perimeter	31	5-10	F,S	15-18	N	25-30	N		
	VW-56	Perimeter	31	5-8	F	15-20	N	25-30	N		
	VW-57	Perimeter	31.5	4-7	F,S	13-18	N	23-26	N	,	
	VW-58	Perimeter	31	5-8	F	14-19	N	24-29	N	_	
	VW-59	Perimeter	31	5-8	F	15-18	N	25-30	N		
	VW-60	Perimeter	32	5-8	F,S	14-19	N	25-30	N		
	VW-61	Perimeter	34	5-9	F	14-19	N	25-30	N	_	_
Reservoir	VW-09	Reservoir	23.5	_	-	-	-	-		3-23	Α

(1) Material type: F = Fill Material.
S = Sump-like Material.
N = Native Material.
A = All Material (fill, sump-like and native).

(2) Perimeter type includes wells within 100 feet of a structure, as well as perimeter wells.

(3) Abandoned.

- = Not Applicable.



TABLE 2.2

SOIL GAS AND INDOOR AIR INTERIM THRESHOLD SCREENING LEVELS FOR CHEMICALS OF CONCERN WASTE DISPOSAL, INC. SUPERFUND SITE

COMPOUND	SOIL GAS THRESHOLD VALUE (ppbv)	INDOOR AIR THRESHOLD VALUE (ppbv)	SITE BOUNDARY THRESHOLD VALUE (ppbv)
Acetone	31,200	312.0	15,600
Benzene	200	2.0	100
Carbon Tetrachloride	68	0.68	34
Chloroethane	75,200	752.0	37,600
Chloroform	340	3.4	170
Dibromoethane	6	0.06	3
1,2-Dichloroethane	360	3.6	180
cis-1,2-Dichloroethane	1,860	18.6	930
1,1-Dichloroethane	25,600	256.0	12,800
1,2-Dichloropropane	186	1.86	93
trans-1,2-Dichloroethene	3,680	36.8	1,840
Ethylbenzene	49,000	490.0	24,500
Tetrachloroethene (Perc)	1,064	10.6	532
Toluene	21,200	212.0	10,600
1,1,2-Trichlorethane	440	4.4	220
1,1,1-Trichloroethane	36,800	368.0	18,400
Trichloroethene	822	8.2	411
Vinyl Chloride	25	0.25	12.5
m,p-Xylene	14,280	142.8	7,140
o-Xylene	14,280	142.8	7,140
Methane (%)	5	1.25	1.25

30747/Rpts/2000AnMoRe (2/1/02/mc)

Source: CDM Federal Programs Corporation, Subsurface Gas Contingency Plan Investigation Report, Waste Disposal, Inc. Superfund Site, January 18, 1999.



TABLE 2.3

NOVEMBER 2000 DEPTH TO GROUND WATER AND EXISTING GROUND WATER MONITORING WELLS CONSTRUCTION DETAILS

WASTE DISPOSAL, INC. SUPERFUND SITE

WELL NUMBER	TOP OF WELL CASING ELEVATION (ft above MSL)	WELL TYPE	WELL SCREEN (ft bgs)	NOV. 2000 DEPTH TO WATER (ft below TOC)	LOCATION RELATIVE TO WDI WASTE SOURCES
GW - 01	153.5	Shallow	38 - 58	38.9	Upgradient
GW - 02	149.3	Shallow	33 - 53	34.6	Upgradient
GW - 03	167.5	Shallow	48 - 68	53.0	North Perimeter of Reservoir
GW - 04	166.8	Shallow	48 - 68	52.2	North Perimeter of Reservoir
GW - 05	166.7	Shallow	43 - 63	52.9	East Perimeter of Reservoir
GW - 06	158.4	Shallow	43 - 63	44.3	Underlies BWZ (East Area)
GW - 07	154.5	Shallow	38 - 58	40.7	Crossgradient to BWZ (East Area)
GW - 08	163.4	Shallow	43 - 63	49.3	West Perimeter of Reservoir
GW - 09	153.5	Shallow	38 - 58	39.6	Crossgradient to BWZ (West Area)
GW - 10	154.7	Well Cluster-Shallow	38 - 58	41.4	Crossgradient to BWZ (West Area)
GW - 11	154.7	Well Cluster-Deep	118 - 128	41.8	Crossgradient to BWZ (West Area)
GW - 13	157.5	Shallow	39 - 59	44.4	Downgradient of BWZ (West Area)
GW - 14	157.8	Shallow	38 - 58	44.6	Downgradient of Reservoir
GW - 15	163.3	Well Cluster-Shallow	48 - 68	49.7	Downgradient of Reservoir
GW - 16	163.1	Well Cluster-Interm.	74 - 79	50.0	Downgradient of Reservoir
GW - 18	159.1	Well Cluster-Interm.	69 - 74	46.0	Downgradient of Reservoir
GW - 19	158.9	Well Cluster-Shallow	39 - 59	45.9	Downgradient of Reservoir
GW - 21	155.2	Shallow	36 - 56	42.3	Downgradient of BWZ (East Area)
GW - 22	156.7	Shallow	58 - 78	55.8	Crossgradient to BWZ (West Area)
GW - 23	157.0	Well Cluster-Shallow	43 - 63	54.1	Downgradient of BWZ (West Area)
GW - 24	156.7	Well Cluster-Deep	103 - 113	55.9	Downgradient of BWZ (West Area)
GW - 26	156.0	Shallow	44 - 64	43.7	Downgradient of BWZ (East Area)
GW - 27	157.0	Shallow	43 - 63	44.8	Downgradient of BWZ (East Area)
GW - 28	157.3	Shallow	44 - 64	45.2	Downgradient of BWZ (East Area)
GW - 29	157.4	Well Cluster-Shallow	44 - 64	45.4	Downgradient of BWZ (East Area)
GW - 30	156.8	Well Cluster-Deep	74 - 94	45.2	Downgradient of BWZ (East Area)
GW - 31	167.2	Shallow	43 - 63	52.6	North Perimeter of Reservoir

30747/Rpts/2000AnMoRe (2/1/02/mc)

ABBREVIATIONS:

bgs = below ground surface

ft = feet

MSL = mean sea level

BWZ = buried waste zone (waste containment/sump areas outside of reservoir)

TOC = top of well casing



TABLE 4.1 VAPOR WELL SAMPLING FREQUENCY IN 2000 WASTE DISPOSAL, INC. SUPERFUND SITE

Well ID	1stQtr	2ndQtr	3rdQtr	4thQtr
VW-01-35	(1)	(1)	(1)	(1)
VW-02-35	(1)	(1)	(1)	(1)
VW-03-35	(1)	(1)	(1)	(1)
VW-04-23	(1)	(1)	(1)	(1)
VW-05-29	(1)	(1)	(1)	(1)
VW-06-34	(1)	(1)	(1)	(1)
VW-08-35	(1)	(1)	(1)	(1)
VW-10-35	х	х	х	х
VW-11-35	х	х	x	х
VW-12-34	(1)	(1)	(1)	(1)
VW-13-31	х	(1)	х	х
VW-14-35	х	(1)	х	(1)
VW-16-34	(1)	(1)	(1)	(1)
VW-17-35	(1)	(1)	(1)	(1)
VW-18-36	х	x	х	x
VW-20-35	(1)	(1)	(1)	(1)
VW-21-36	(1)	(1)	(1)	(1)
VW-22-35	x	х	X	х
VW-23-36	(1)	(1)	(1)	(1)
VW-24-35	(1)	(1)	(1)	(1)
VW-25-35	x	(1)	x	(1)
VW-26-35	(1)	(1)	(1)	(1)
VW-27-09	x	X	X	X
VW-27-19	х	х	х	х
VW-27-33	x	х	х	х
VW-28-10	X	х	X	x
VW-28-25	х	х	х	x
VW-29-10	х	х	х	х
VW-29-23	х	х	х	х
VW-29-35	X	X	х	X
VW-30-07	x	х	х	х
VW-30-23	x	x	x	х
VW-30-35	x	х	х	x
VW-31-10	x	x	X	х
VW-31-30	x	x	x	x
VW-32-08	x	x	X	X
VW-32-18	x	x	x	<u>x</u>
VW-32-35	x	- X	x	<u>x</u>
VW-33-10	x	- x	X	x
VW-33-35	x	- x	X	^x
VW-34-10	x	x	X	^x
VW-34-23	X	x	x	x

Well ID	1stQtr	2ndQtr	3rdQtr	4thQtr
VW-34-40	х	х	Х	х
VW-35-10	х	X	Х	х
VW-35-38	х	х	х	х
VW-36-10	х	х	х	х
VW-36-30	х	х	х	х
VW-37-10	х	х	х	x
VW-37-30	х	х	х	X
VW-38-10	x	х	х	х
VW-38-34	x	x	х	х
VW-39-07	х	х	X	Х
VW-39-30	х	х	х	х
VW-40-10	х	х	x	х
VW-40-25	х	х	X	х
VW-41-08	х	х	X	X
VW-41-20	х	х	х	х
VW-42-10	х	X	x	х
VW-42-30	х	X	X	х
VW-43-09	х	(1)	x	(1)
VW-43-19	х	(1)	х	х
VW-43-32	х	(1)	х	х
VW-44-07	х	X	X	х
VW-44-16	х	Х	Х	X
VW-44-30	X	х	X	х
VW-45-13	х	(2)	х	Х
VW-45-22	х	x	х	X
VW-45-30	X	Х	x	X
VW-46-07	х	X	X	х
VW-46-15	х	х	x	х
VW-46-27	х	X	х	х
VW-47-08	(1)	(1)	(1)	(1)
VW-47-18	(1)	(1)	(1)	(1)
VW-47-30	(1)	(1)	(1)	(1)
VW-48-08	x	(1)	X	x
VW-48-17	х	(1)	х	х
VW-48-35	х	(1)	х	х
VW49-10	х	X	х	х
VW49-18	x	х	х	Х
VW49-30	х	х	х	х
VW-50-08	х	х	х	х
VW-50-18	х	х	x	х
VW-50-35	х	x	х	х
VW-51-08	X	х	x	X

Well ID	lstQtr	2ndQtr	3rdQtr	4thQtr
VW-51-18	х	х	x	х
VW-51-30	х	X	х	x
VW-52-10	х	Х	Х	х
VW-52-19	Х	Х	X	х
VW-52-30	Х	Х	Х	х
VW-53-10	х	х	X	Х
VW-53-20	х	х	X	x
VW-53-30	х	х	Х	х
VW-54-12	х	X	Х	Х
VW-54-20	х	Х	X	х
VW-54-30	х	х	Х	X
VW-55-05	х	(2)	х	(2)
VW-55-18	х	Х	X	x
VW-55-29	х	x	X	Х
VW-56-08	Х	х	х	х
VW-56-17	х	Х	x	Х
VW-56-28	х	Х	х	х
VW-57-07	x	Х	X	х
VW-57-18	х	Х	х	х
VW-57-26	х	х	х	х
VW-58-08	х	Х	х	х
VW-58-19	Х	X	X	X
VW-58-29	Х	х	X	х
VW-59-07	х	х	X	х
VW-59-17	х	х	Х	X
VW-59-27	Х	X	X	X
VW-60-10	Х	X	X	х
VW-60-18	х	Х	х	Х
VW-60-28	х	Х	х	X
VW-61-08	х	X	X	х
VW-61-19	Х	X	X	Х
VW-61-30	Х	x	Х	X
VW-62-08	Х	X	X	Х
VW-62-18	X	Х	Х	х
VW-62-29	Х	Х	Х	X
VW-63-08	х	х	х	x
VW-63-18	х	x	х	X
VW-63-28	х	x	х	х
MP-1-05	х	X	Х	x
MP-1-15	Х	х	х	х
MP-2-05	Х	х	Х	Х
MP-2-15	Х	х	х	х

Notes:

(1) Not sampled as part of reduced sampling program.

(2) Not sampled due to water in the well. x = sampled



TABLE 4.2

CRITICAL VAPOR WELLS⁽¹⁾ WASTE DISPOSAL INC. SUPERFUND SITE

				ł	irst (Quart	er					Quai					hird (Fo	ourth	Quar	ter	
			L_								Const	liuent	s tha	texe	eeded	ITS	L star	idard	s					,		
Area	Well ID	Well Screen	Methane	Benzene	m&p-Xylenes	TCE	PCE	Vinyl Chloride	Methane	Benzene	m&p-Xylenes	TCE	PCE	Vinyl Chloride	Methane	Benzene	m&p-Xylenes	TCE	PCE	Vinyl Chloride	Methane	Benzene	m&p-Xylenes	TCE	PCE	Vinyl Chloride
	VW-18	screened throughout	1							х						х										
A 1	VW-35	deep										х						х		Г				х		Т
Arca I	VW-46	shallow	x												х						х					
	VW-62	shallow	x	Ī		Ī			х						х					1	х					Π
	3707.42	intermediate	х					х							х					х	х					X
	VW-43	deep	x		T			х							x					х	х					X
		shallow	x	x	x			х							х	x	х			x	х	X				Х
	VW-45	intermediate	x	x	x			x	х	х				x	х	х				х	х	x				×
Area 2		deep	x		\Box				x					x	х					х	x					x
		shallow	х	х				х							X	x				x	х	x				X
	VW-48	intermediate	х	X	Γ										х	x				\Box	х	x				T
		deep	X												х					Г	х					T
	1/11/61	intermediate	х	x					х	х					х						x	х				Π
	VW-51	deep	x			х		х	х			х		Х	X											X
Area 5	MP-1	intermediate	х						х						х						х					
	MP-2	intermediate	х						х						X						х					Γ
Arca 7	VW-25	screened throughout	х						х										L							
	VW-13	screened throughout						X												x						
	VW-14	screened throughout						X																		
	VW-22	screened throughout	Ι			x						х						х						x		
	VW-49	intermediate					x						x						x						x	\prod
	_ vw-49	deep					x						x						X						X	
	VW-53	shallow	Γ											х						x						X
		shallow	Х												_	[Γ
	VW-55	intermediate		Π				х						х						x						X
A 0		deep						x						x	х											X
Arca 8		shallow																		х						X
	VW-56	intermediate																						x		
		deep																						Х		Г
	VW-57	intermediate				х																				
	V W-3/	deep				х						х														1
		shallow	T			x						х						X						x		
	VW-58	intermediate	Г			х						х						х						х		
		deep				х						х				_		x						x		
	VW-61	intermediate	Г			I		x												\Box			T			Г

⁽¹⁾ A critical well is defined as a well with an ITSL exceedance during the past 2 years.



TABLE 4.3 1998 - 2000 SUMMARY OF TREND DATA FOR SELECTED⁽¹⁾ SOIL GAS WELLS FOR ACETONE, BENZENE, ETHYLBENZENE, m- & p-XYLENE, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE

Page 1 of 6

Sample Number	Location	Constituents ⁽²⁾		1	998			19	999			20	000	age I of 6
	200000	Constituents	1stQ	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ
		Acetone	2.8	ND	2.6	3.6	4.0	5.6	11.0	8.5	4.5	3.5	5.1	1.7
		Benzene	ND	ND	ND	ND	1.6	ND						
		Ethylbenzene	ND	ND	ND	ND	0.9	ND	1.1	1.1	ND	ND	0.84	1.1
	9843 S. Greenleaf Ave in	m- & p-Xylene	1.6	ND	1.2	ND	6.0	ND	4.2	3.8	1.9	ND	3.7	3.5
VW-30-07	Area 5 near the east front	Methane	4.8	9.8	1.5	1.1	2.3	11.0	1.5	ND	0.72	ND	1.2	1.2
	corner of the building	PCE	1.7	2.5	3.1	2.7	2.3	1.6	8.2	1.9	1.1	2.0	3.6	1.4
	Ü	Toluene	2.4	1.4	2.2	1.7	5.6	ND	4.0	6.7	1.1	ND	4.0	1.9
		TCE	0.69	0.51	1.0	ND	ND	ND	2.7	ND	ND	ND	ND	ND
i		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.2	6.2	7.1
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	0.9	ND	1.1	ND						
1	9843 S. Greenleaf Ave in	m- & p-Xylene	2.1	ND	3.9	ND	ND	ND	ND	0.74	2.0	2.1	4.5	ND
VW-30-23	Area 5 near the east front	Methane	9,200	12,000	1,300	32.0	17.0	19.0	1.9	0.91	0.6	1.6	31.0	45.0
1	comer of the building	PCE	32.0	27.0	55.0	220	210	190	190	180	170	150	210	160
	Ü	Toluene	2.7	0.72	2.0	1.0	ND	ND	ND	2.4	1.0	4.1	2.7	ND
		TCE	32.0	21.0	10.0	6.6	3.4	4.8	3.2	2.7	3.1	3.1	8.5	4.9
		Vinyl Chloride	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.1	8.4
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.75	ND
	9843 S. Greenleaf Ave in	m- & p-Xylene	2.3	ND	1.3	ND	ND	ND T	0.75	0.61	ND	ND	3.4	ND
VW-30-35	Area 5 near the east front	Methane	11,000	13,000	3,380	290	130	84	15	7.2	2.0	2.3	35.0	41.0
	corner of the building	PCE	46	39	67	250	250	210	220	220	190	160	190	170
		Toluene	4.0	1.1	2.2	1.1	ND "	ND_	ND	2.1	ND	ND	1.9	ND
		TCE	76.0	40.0	23.0	17.0	7.8	7.1	5.0	4.8	4.6	4.5	7.4	6.0
		Vinyl Chloride	5.5	2.7	1.3	ND								
		Acetone			7.7	7.1	5.9	7.9	8.5	2.4	4.7	3.3	3.3	5.9
		Benzene			ND	1.7	ND	ND	ND	1.0	ND	ND	ND	ND
		Ethylbenzene	l — — — —		ND	ND	ND	ND	0.64	1.2	ND	0.64	ND	3.3
		m- & p-Xylene			2.3	2.5	ND	_ ND	3.3	5.3	ND	2.8	1.6	17
VW-42-10	In the east comer of Area 2	Methane			2.0	1.3	ND	0.91	ND	ND	1.8	ND	1.1	ND
	next to Area 3	PCE			6.2	8.5	4.2	4.7	7.0	5.3	3.1	2.9	6.0	2.7
]		Toluene			3.1	3.8	ND	0.67	1.8	5.6	ND	2.5	1.9	1.1
		TCE			ND .	ND	ND	0.80	ND	ND	ND	ND	ND	ND -
1		Vinyl Chloride			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND = Concentration of the constituent was not detected above the laboratory's reporting limit. Bold numbers show concentrations that exceeded the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acctone (15,600 ppbv); benzene (100 ppbv); ethylbenzene (24,500 ppbv); m- & p-xylenes (7,140 ppbv); methane (12,500 ppmv); PCE (532 ppbv); TCE (411 ppbv); toluene (10,600 ppbv) and vinyl chloride (12.5 ppbv).

Shaded area indicates that the well was not sampled during that quarter.



⁽¹⁾ Wells and constituents shown in table were selected by the EPA.
(2) Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

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Sample Number	Location				1998			19	999			20	000	1 age 2 01 0
Dampie Mamoer	20cation	Constituents ⁽²⁾	IstQ	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ
	<u></u>	Acetone			3.4	5.8	1.2	6.5	9.5	41.0	2.6	5.1	6.1	12
		Benzene			ND	4.3	ND	ND	ND	1.1	ND	ND	ND	ND
		Ethylbenzene			ND	2.5	ND	ND	0.7	1.2	ND	ND	ND	ND
		m- & p-Xylene			2.3	11.0	ND	ND	3.6	5.5	1.8	2.3	1.3	ND
VW-42-30	In the east corner of Area 2	Methane			ND	ND	ND	ND	53.0	ND	ND	ND	ND	ND
	next to Area 3	PCE			9.3	13.0	7.9	8.7	8.8	8.9	9.0	6.4	9.1	6.6
		Toluene			2.9	25.0	ND	ND	1.9	6.2	0.96	2.0	1.9	ND
		TCE			ND	0.93	ND							
		Vinyl Chloride			ND									
		Acetone			ND		ND	ND						
		Benzene		I	9.90	32,000	9,500	23,000	28,000	45,000	34,000		37,000	3,400
		Ethylbenzene			0.97	6,000	1,500	4,900	5,900	8,700	8,300		9,900	680
	In the west corner of Area 2	m- & p-Xylene			6.00	23,000	5,900	18,000	23,000	32,000	30,000		21,000	2,100
VW-45-12		Methane			213,000	260,000	173,000	179,000	176,000	168,000	119,000		116,000	126,000
	next to the building(3)	PCE			ND		ND	ND						
		Toluene			7.20	39,000	8,400	20,000	21,000	24,000	9,800		21,000	1,900
		TCE			0.26	ND	ND	ND	290	ND	ND		ND	ND
		Vinyl Chloride			55.00	140,000	31,000	75,000	70,000	66,000	48,000		76,000	3,600
		Асетопе	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	570	2,800	4.7	1,800	7,200	7,300	2,200	3,600	7,700	5,100	3,800	290
		Ethylbenzene	230	210	ND	ND	2,300	5.400	4,100	3,600	6,100	3,800	5,400	400
	In the west corner of Area 2	m- & p-Xylene	ND	350	ND	570	9,600	13,000	7,600	8,200	18,000	11,000	10,000	320
VW-45-22		Methane	61,000	63,100	90,200	101,000	97,700	120,000	12,800	168,000	147,000	114,000	135,000	137,000
	next to the building(3)	PCE	_ ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Toluene	100	770	0.72	600	13,000	12,000	2,800	2,200	3,500	1,000	ND	72
		TCE	530	240	ND									
	_	Vinyl Chloride	380	6,500	87	38,000	16,000	27,000	17,000	17,000	15,000	9,100	13,000	980
		Acetone	100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	380	41	ND	32	44	33	25	ND	ND	ND	20	ND
		Ethylbenzene	39	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	In the west corner of Area 2	m- & p-Xylene	110	ND	ND	21	ND							
VW-45-30		Methane	32,000	14,300	27,800	11,200	18,000	17,000	18,000	17,800	16,100	15,200	15,000	14,800
	next to the building (3)	PCE	ND	ND	ND	24	14	10	ND	ND	ND	ND	ND	ND
		Toluene	47	ND	ND	ND	ND_	ND						
		TCE	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Vinyl Chloride	ND	ND	ND	99	73	62	47	52	ND	34	32	27



Wells and constituents shown in table were selected by the EPA.

Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

⁽³⁾ Within the waste prism.

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold numbers show concentrations that exceeded the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (15,600 ppbv); benzene (100 ppbv); ethylbenzene (24,500 ppbv); m- & p-xylenes (7,140 ppbv); methane (12,500 ppmv); PCE (532 ppbv); TCE (411 ppbv); toluene (10,600 ppbv) and vinyl chloride (12.5 ppbv).

Shaded area indicates that the well was not sampled during that quarter.

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Sample Number	Location				1998			19	999			2	2000	
Campie Manie	Dotation	Constituents ⁽²⁾	IstQ	2ndQ	3rdQ	4thQ	1stQ	2ndQ	3rdQ	4thQ	lstQ	2ndQ	3rdQ	4thQ
-		Acetone			ND	ND	ND		ND	ND	ND	NĐ	ND	ND
		Benzene			7.1	11.0	ND		2.3	6.0	4.9	6.3	3.6	6.3
		Ethylbenzene			5.2	12.0	2.5		4.1	7.7	5.6	2.4	7.3	11
	9620 Santa Fe Springs Road	m- & p-Xylene			9.0	23.0	5.0		8.2	17.0	9.4	8.5	18	32
VW-46-07	in Area 1 just off the west	Methane			17,200	46,500	11,100		15,900	32,200	34,400	10,600	25,000	35,800
	corner of the building	PCE			1.5	ND	ND		ND	ND	ND	ND	ND	ND
	· [Toluene			11.0	15.0	3.6		4.6	12.0	3.1	8.8	4.1	27
		TCE			0.9	ND	ND		22.0	ND	ND	ND	ND	ND
		Vinyl Chloride			2.6	4.8	ND		1.2	ND	ND	ND	1.8	ND
		Acetone	2.1	8.8	4.1	14.0	4.9	10.0	16.0	ND	2.2	6.0	4.9	3.5
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.67	ND	1.2
	9620 Santa Fe Springs Road	m- & p-Хуlепе	1.9	ND	1.5	1.4	ND	ND	ND	4.7	1.0	2.9	0.81	5.1
VW-46-15	in Area 1 just off the west	Methane	ND	ND	ND	ND	0.6	ND	ND	ND	ND	ND	ND	ND
	corner of the building	PCE	130	160	160	210	170	150	170	190	140	110	120	120
		Toluene	1.7	ND	2.8	2.0	ND	ND	6.0	5.1	1.1	1.7		5.2
	ļ	TCE	15.0	16.0	16.0	22.0	13.0	14.0	15.0	14.0	11.0	9.2	10	9.0
	l i	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone	11.0	6.0	2.3	6.4	5.6	12.0	21.0	6.0	3.2	2.3	3.9	6.6
	 	Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	3.3	ND	ND	0.91
	9620 Santa Fe Springs Road	m- & p-Xylene	1.6	ND	1.4	ND	ND	ND	ND	5.5	14.0	2.0	ND	4.1
VW-46-27	in Area 1 just off the west	Methane	ND	ND	ND	ND	ND	ND	ND	ND	ND_	ND	ND	ND
	corner of the building	PCE	220	230	190	230	210	190	210	180	150	120	120	120
		Toluene	2.1	ND	2.6	1.4	ND	1.8	ND	6.6	6.4	1.9	ND	4.1
		TCE	31.0	28.0	21.0	29.0	19.0	23.0	20.0	18.0	14.0	11	11	9.6
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Acetone	ND		ND	ND	ND	ND	ND		ND		ND	ND
		Benzene	2,200		820	1,300	810	880	680		2,500		3,000	1,400
		Ethylbenzene	170		120	ND	42	ND	49		ND		94	ND
		m- & p-Xylene	280		ND	ND	43	ND	51		ND		78	ND
VW-48-08	In the RV Lot in Area 2	Methane	365,000		258,000	150,000	208,000	ND	184,000		412,000		169,000	173,000
		PCE	ND		ND	ND	ND	ND	ND		ND		ND	ND
]	Toluene	ND		ND	ND	41	ND	41		ND		60	ND
		TCE	ND	100	ND	ND	ND	ND	ND		ND		ND	ND
	ļ į	Vinyl Chloride	480		750	490	450	420	510		490		470	190

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold numbers show concentrations that exceeded the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (15,600 ppbv); benzene (100 ppbv); cthylbenzene (24,500 ppbv); m- & p-xylenes (7,140 ppbv); methane (12,500 ppmv); PCE (532 ppbv); TCE (411 ppbv);

tolucne (10,600 ppbv) and vinyl chloride (12.5 ppbv). Shaded area indicates that the well was not sampled during that quarter.



⁽¹⁾ Wells and constituents shown in table were selected by the EPA.
(2) Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

Page 4 of 6 1998 1999 2000 Sample Number Location Constituents(2) 1stO 2ndO 3rdO 3rdO 4thO 3rdO 4thO IstO 2ndO IstO 2ndO 4thO ND ND ND ND Acetone ND ND ND ND ND ND 6,700 4,100 4.200 4.200 2,900 7.100 3,500 4.900 4.200 3,200 Benzene 1,300 3.100 5.200 8.500 4.800 6.500 Ethylbenzene 5,400 6.500 6.400 6.100 m- & p-Xylene 6.400 1.400 1.800 3.900 3,800 7,700 4.300 4.000 3,100 2,200 539,000 441,000 592,000 517,000 356,000 ND 530,000 781,000 789,000 789,000 Methane VW-48-17 In the RV Lot in Area 2 PCE ND Toluene ND TCE ND Vinyl Chloride ND ND ND Acetone ND 12 ND Benzene Ethylbenzene 17 ND 7.5 ND ND ND ND ND ND ND ND m- & p-Xylene 32 ND ND ND ND ND ND ND 6.9 ND 6.3 37,000 27,500 13,500 ND 14.800 20,300 Methane 31,600 16,600 19,600 14.800 20,400 VW-48-35 In the RV Lot in Area 2 PCE 27 ND 18 21 15 52 30 28 19 11 7.3 Toluene ND 5.5 ND 6.2 ND 15 ND ND ND 6.4 ND TCE ND ND ND ND ND Vinyl Chloride ND ND ND ND ND ND ND 6.1 ND Acetone 10 8.4 51 12 2.4 15 42 Benzene ND 0.92 Ethylbenzene 1.1 ND 0.61 9843 S. Greenleaf Ave in m- & p-Xylene ND ND 4.1 1.3 1.4 ND 2.5 4.1 Methane 80 79 880 280 71 150 1,550 350 VW-51-08 Area 5 near the east rear PCE 0.63 0.61 1.2 0.68 ND ND 0.77 corner of the building 0.96 Toluene 0.72 ND 4.3 6.5 1.5 ND 3.1 3.0 TCE 0.45 ND 0.55 ND ND ND ND 0.96 Vinyl Chloride ND ND ND ND ND ND ND ND Acetone ND 1.200 2.900 3.100 12,000 5,400 Benzene 11 6.500 13,000 10.000 300 ND 2,100 ND ND 1,500 650 340 ND ND ND Ethylbenzene 810 870 ND ND 0.59 ND ND 480 880 510 220 ND m- & p-Xylene 410 1.000 ND ND 9843 S. Greenleaf Ave in VW-51-18 Methane 386,000 234,000 241.000 328,000 901,000 423,000 390,000 239,000 216,000 211,000 30,100 836,000 Area 5 near the east rear PCE ND corner of the building ND ND ND ND ND ND ND ND Toluene ND ND ND ND TCE ND Vinyl Chloride ND ND



⁽¹⁾ Wells and constituents shown in table were selected by the EPA.

⁽²⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold numbers show concentrations that exceeded the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (15,600 ppbv); benzene (100 ppbv); ethylbenzene (24,500 ppbv); m- & p-xylenes (7,140 ppbv); methane (12,500 ppmv); PCE (532 ppbv); TCE (411 ppbv); toluene (10,600 ppbv) and vinyl chloride (12.5 ppbv).

Shaded area indicates that the well was not sampled during that quarter.

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Sample Number	Location				1998			I	999			20	000	
oumpie ramoer	Locution	Constituents ⁽²⁾	1stQ	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ	1stQ	2ndQ	3rdQ	4thQ
		Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	310	86	27	36	27	ND	ND	17	17	ND	2.0	20
		Ethylbenzene	69	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	9843 S. Greenleaf Ave in	m- & p-Xylene	110	ND	1.8	ND	ND	ND	ND_	ND	ND	ND	ND	ND
VW-51-30	Area 5 near the east rear	Methane	41,000	38,100	78	13,300	18,900	22,300	23,400	23,800	23,100	23,300	24,400	23,300
	comer of the building	PCE	ND	ND	1,400	420	570	200	120	83	61	42	2.7	21
		Toluene	40	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TCE	200	130	300	400	1,000	550	500	540	510	420	45	370
		Vinyl Chloride	82	65	4.4	16	69	37		50	36	33	3.0	27
		Acetone	1			ND			ND	ND	ND		ND	
		Benzene				ND			ND	ND	ND		ND	
	1	Ethylbenzene		1		ND			ND	ND	ND		ND	-
	12803 Los Nietos Rd in	m- & p-Xylene				ND			ND	ND	ND		10	
VW-55-05	Area 8 located off the west	Methane				119,000			115,000	74,700	45,500		6,810	
	back comer of the building	PCE				ND			ND	ND	ND		10	
	Ĭ	Toluene				ND			ND	ND	ND		ND	
	\	TCE		}		ND			ND	ND	ND		200	
		Vinyl Chloride				ND			ND	ND	ND		38	
		Acetone			Ī	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1	Benzene				20	13	20	13	12	11	6.4	9.0	14
		Ethylbenzene				ND	ND	ND	ND	ND	ND	ND	ND	ND
	12803 Los Nietos Rd in	m- & p-Xylene				ND	ND	11	ND	ND	ND	ND	ND	ND
VW-55-18	Area 8 located off the west	Methane				9,930	13,000	10,100	8,890	8,720	8,630	5,720	7,580	7,370
	back corner of the building	PCE				8.4	6.1	12	10	9.1	8.9	8.1	9.9	ND
		Toluene				ND	ND	ND	ND	ND	ND	ND	ND	4.4
		TCE				740	470	740	520	360	310	240	250	340
		Vinyl Chloride				87	73	110	65	50	41	31	41	33
		Acetone				ND	130	ND	ND	ND	ND	ND	ND	ND
		Benzene				8.7	ND	ND	6.4	5.2	4.7	4.8	ND	4.7
		Ethylbenzene				ND	ND	ND	ND	ND	ND	ND	ND	ND
	12803 Los Nietos Rd in	m- & p-Xylene				ND	ND	ND	ND	3.2	ND	ND	ND	5.1
VW-55-29	Area 8 located off the west	Methane				8,760	11,000	8,760	8,430	7,300	6,810	6,580	68,300	6,790
	back corner of the building	PCE				10	9.0	9.2	12	10	11	10	ND	12
		Toluene				ND	ND	ND	ND	ND	ND	ND	ND	4.8
		TCE				650	470	410	460	320	300	230	ND	240
		Vinyl Chloride				82	22	58	68	53	45	43	ND	37



 ⁽¹⁾ Wells and constituents shown in table were selected by the EPA.
 (2) Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

ND = Concentration of the constituent was not detected above the laboratory's reporting limit. Bold numbers show concentrations that exceeded the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acetone (15,600 ppbv); benzene (100 ppbv); ethylbenzene (24,500 ppbv); m- & p-xylenes (7,140 ppbv); methane (12,500 ppmv); PCE (532 ppbv); TCE (411 ppbv); toluene (10,600 ppbv) and vinyl chloride (12.5 ppbv).

Shaded area indicates that the well was not sampled during that quarter.

TABLE 4.3

1998 - 2000 SUMMARY OF TREND DATA FOR SELECTED⁽¹⁾ SOIL GAS WELLS FOR ACETONE, BENZENE, ETHYLBENZENE, m- & p-XYLENE, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE

(Continued)

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Sample Number	Location	C		1	998			19	199			20	00	age o or o
		Constituents ⁽²⁾	IstQ	2ndQ	3rdQ	4thQ	1stQ	2ndQ	3rdQ	4thQ	1stQ	2ndQ	3rdQ	4thQ
		Acetone				4.5	4.6	12	7.7	ND	ND	6.0	ND	11
		Benzene				0.85	ND							
į į		Ethylbenzene				ND	0.94							
	12741 Los Nietos Rd in	m- & p-Xylene				0.76	ND	ND	1.7	ND	ND	ND	9.2	3.0
VW-58-08	Area 8 located off the west	Methane				1.30	0.89	0.88	1.0	1.2	0.68	1.3	1.6	1.2
<u> </u>	back comer of the building	PCE				26	13	15	34	18	11	14	39	16
		Toluene				1.10	ND	1.9						
		TCE				3,200	2,200	2,200	4,400	3,200	1,500	1,900	2,800	1,400
		Vinyl Chloride				ND								
		Acetone				6.6	1.5	12	6.0	ND	ND	ND	34	2.7
		Benzene				3.7	1.0	0.84	0.88	ND	ND	ND	ND	ND
		Ethylbenzene				ND								
	12741 Los Nietos Rd in	m- & p-Xylene				4.1	ND	ND	1.7	ND	ND	ND	ND	0.71
VW-58-19	Area 8 located off the west	Methane				ND	0.78	1.2	ND	ND	ND	0.64	ND	ND
	back comer of the building	PCE				210.0	120	140	150	170	170	140	160	130
	-	Toluene				3.7	0.69	ND	2.1	ND	ND	ND	ND	ND
		TCE				5,400	3,700	4,300	4,400	4,700	3,500	3,400	3,400	2,900
		Vinyl Chloride				ND								
		Acetone				8	47	6.0	5.7	ND	ND	ND	ND	4.5
		Benzene				ND	0.98	2.1	ND	_ND	ND	ND	ND	ND
		Ethylbenzene				ND	ND	2.2	ND	ND	ND	ND	ND	ND
	12741 Los Nietos Rd in	m- & p-Xylene				ND	ND	9.8	ND	ND	ND	ND	ND	1.4
VW-58-29	Area 8 located off the west	Methane				0.53	0.99	0.65	ND	0.81	0.90	ND	0.70	ND
	back comer of the building	PCE				190	100	120	200	150	160	140	160	130
	_	Toluene				ND	ND	13	1.7	ND	ND	ND	ND	1.2
		TCE				4,100	2,800	2,500	2,700	2,800	2,700	2,500	2,100	1,800
		Vinyl Chloride				ND								

30747/Rpts/2000AnMoRe (2/1/02/ks)

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold numbers show concentrations that exceeded the Soil Gas Interim Threshold Screening Levels (ITSLs).

ITSLs: acctone (15,600 ppbv); benzene (100 ppbv); cthylbenzene (24,500 ppbv); m- & p-xylenes (7,140 ppbv); methane (12,500 ppmv); PCE (532 ppbv); TCE (411 ppbv); toluene (10,600 ppbv) and vinyl chloride (12.5 ppbv).

Shaded area indicates that the well was not sampled during that quarter.



Wells and constituents shown in table were selected by the EPA.
Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).

TABLE 4.4

CONSTITUENTS WHICH EXCEEDED GROUND WATER MAXIMUM CONTAMINATION LEVELS (MCLs) DURING THE 2000 GROUND WATER MONITORING PROGRAM WASTE DISPOSAL, INC. SUPERFUND SITE

WELL #	DATE OF SAMPLE	CONSTITUENT	MCL	CONCENTRATION
GW-02	Feb-00 Nov-00	Thallium Thallium	0.002 ppm 0.002 ppm	0.0061 ppm 0.0064 ppm
GW-05	Feb-00	Manganese	0.05 ppm	1.8 ppm
	Apr-00	Iron	0.3 ppm	0.41 ppm
]	Manganese	0.05 ppm	2.5 ppm
	Nov-00	Manganese	0.05 ppm	2.5 ppm
GW-06	Aug-00	Antimony	0.006 ppm	0.01 ppm
GW-08	Feb-00	Iron		0.91 ppm
O W-08	Peb-00		0.3 ppm	• •
	1 - 00	Manganese	0.05 ppm	3.4 ppm
	Apr-00	Iron	0.3 ppm	0.39 ppm
		Manganese	0.05 ppm	2.8 ppm
	Aug-00	Iron	0.3 ppm	0.40 ppm
	,	Manganese	0.05 ppm	3.1 ppm
	Nov-00	Iron	0.3 ppm	0.30 ppm
	1	Manganese	0.05 ppm	3.3 ppm
		Thallium	0.002 ppm	0.014 ppm
GW-10	Feb-00	Manganese	0.05 ppm	3.1 ppm
	Apr-00	Manganese	0.05 ppm	3.1 ppm
	Aug-00	Manganese	0.05 ppm	2.4 ppm
	Nov-00	Manganese	0.05 ppm	2.8 ppm
	1.5. 55	Thallium	0.002 ppm	0.023 ppm
GW-11	Apr-00	Tetrachloroethene	5 ppb	110 ppb
Gw-11	,Жрі-оо		1	• • •
	N00	Trichloroethene	5 ppb	17 ppb
	Nov-00	Tetrachloroethene	5 ppb	100 ppb
		Trichloroethene	5 ppb	17 ppb
GW-13	Feb-00	Manganese	0.05 ppm	6.9 ppm
	Apr-00	Manganese	0.05 ppm	5.4 ppm
	Aug-00	Manganese	0.05 ppm	6.7 ppm
	Nov-00	Manganese	0.05 ppm	6.2 ppm
		Thallium	0.002 ppm	0.028 ppm
GW-14	Feb-00	Manganese	0.05 ppm	6.9 ppm
	Apr-00	Manganese	0.05 ppm	6.5 ppm
	Aug-00	Manganese	0.05 ppm	5.8 ppm
	Nov-00	Manganese	0.05 ppm	6.3 ppm
	1,0,0	Thallium	0.002 ppm	0.026 ppm
GW-15	Feb-00	Manganese	0.05 ppm	2.6 ppm
GM-12	I +	-		
	Aug-00	Manganese	0.05 ppm	2.9 ppm
	Nov-00	Manganese	0.05 ppm	2.0 ppm
GW 10	N. 00	Thallium	0.002 ppm	0.012 ppm
GW-18	Nov-00	Thallium	0.002 ppm	0.0071 ppm
GW-19	Feb-00	Manganese	0.05 ppm	2.6 ppm
	Apr-00	Manganese	0.05 ppm	2.4 ppm
	Aug-00	Manganese	0.05 ppm	2.4 ppm
	Nov-00	Manganese	0.05 ppm	0.89 ppm
GW-21	Apr-00	Manganese	0.05 ppm	2.6 ppm
	Aug-00	Manganese	0.05 ppm	2.8 ppm
	Nov-00	Manganese	0.05 ppm	3.0 ppm
		Thallium	0.002 ppm	0.011 ppm
GW-22	Feb-00	Mercury	0.002 ppm	0.0033 ppm
GW-23	Apr-00	Manganese	0.05 ppm	0.37 ppm
U 11 -43	Nov-00	Manganese	0.05 ppm	1.2 ppm
	1404-00	Manganese Thallium		0.0079 ppm
C357.24	F-1-00		0.002 ppm	
GW-24	Feb-00	Tetrachloroethene	5 ppb	41 ppb
		Trichloroethene	5 ppb	6.2 ppb
	Apr-00	Tetrachloroethene	5 ppb	47 ppb
	l l	Trichloroethene	5 ppb	7.0 ppb
	1	Selenium	0.05 ppm	0.052 ppm
	Aug-00	Tetrachloroethene	5 ppb	27 ppb
	Į l	Selenium	0.05 ppm	0.056 ppm
	Nov-00	Tetrachloroethene	5 ppb	25 ppb
GW-26	Арг-00	Manganese	0.05 ppm	0.054 ppm
	Nov-00	Manganese	0.05 ppm	0.24 ppm
GW-27	Apr-00	Manganese	0.05 ppm	0.64 ppm
	Nov-00	Manganese	0.05 ppm	0.69 ppm

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TABLE 4.5

1998 - 2000 SUMMARY OF TREND DATA FOR SELECTED⁽¹⁾ GROUND WATER MONITORING WELLS FOR BENZENE, PCE, TCE AND TOLUENE WASTE DISPOSAL INC. SUPERFUND SITE

WELL	WELL	CONSTITUENTS(4)	1988		1992		19	95	199	97 ⁽³⁾		19	998			19	99			20	00	
NUMBER	LOCATION	CONSTITUENTS	Nov	Feb	May	Aug	June	Sep	Sep	Sep	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GW-01	Shallow	Tetrachloroethene (PCE)	ND	ND	ND	ND	13.0	11.0	6.0	6.6	5.9	5.6	6.0	ND	3.2	ND	2.8	2.1	2.5	ND	ND	ND
GW-01	Upgradient	Toluene	ND	ND	ND	ND	3.0	ND	3.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Trichloroethene (TCE)	ND	ND	ND	ND -	ND	ND	2.0	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene																				
	D	PCE																				
GW-32 ⁽⁴⁾	Deep Upgradient	Toluene																				
		TCE																				
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GW-07	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.8	ND	ND	ND	ND	ND	ND	ND	ND
GW-07	Upgradient	Toluene	1.0	ND	ND	ND	ND	ND	7.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
•		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GW-10	Shallow	PCE	ND	ND	ND	ND	ND	ND	0.6	1.0	1.2	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND
GW-10	Crossgradient	Toluene	3.0	ND	ND	ND	4.1	ND	3.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
j		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Deep	PCE	11.0	ND	8.0	17.0	ND	2.9	30.0	40.0	74.0	77.0	86.0	91.0	ND	88.0	ND	120.0	ND	110.0	ND	100.0
GW-11	Crossgradient	Toluene	ND	ND	ND	ND	3.7	ND	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		TCE	ND	ND	ND	ND	ND	ND	4.0	4.6	6.8	7.6	9.5	9.2	ND	11.0	ND	14.0	ND	17.0	ND	17.0
****		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Shallow	PCE	ND	ND	ND	ND	ND	ND	3.0	4.3	5.3	5.1	4.3	2.6	4.2	3.6	2.9	ND	2.7	3.2	ND	ND
GW-22	Crossgradient	Toluene	5.0	ND	ND	ND	ND	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1	S	TCE	ND	ND	ND	ND	ND	ND	2.0	3.3	ND	ND	2.3	2.6	2.2	ND	ND	ND	2.0	3.5	2.3	3.0
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	0.56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GW-23	Crossgradient	Toluene	ND	ND	ND	ND	2.6	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	g	TCE	ND	ND	ND	ND	ND	ND	ND	0.65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GW-26	Downgradient	Toluene	4.0	ND	ND	ND	1.8	ND	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Ü	TCE	18.0	8.0	7.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Benzene	ND	ND	ND	ND	1.9	ND	ND	ND	ND	ND	ND	ND	ND I	ND	ND	ND	ND	ND	NĐ	ND
	Shallow	PCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GW-28	Downgradient	Toluene	ND	ND	ND	ND	9.4	ND	8.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ļ		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
$\overline{}$		Benzene												-			***************************************	\vdash				
	Shallow	PCE																			,	
GW-33 ⁽³⁾	Downgradient					-						t	 					-				
GM-22.	Downgragient	Toluene							l .			i	1 1					1				

⁽¹⁾ Wells and constituents shown in table were selected by the EPA.

Numbers represent concentrations above the laboratory's reporting detection limit.

Bold numbers show concentrations that exceeded the MCL (i.e., Benzene = 1.0 μ g/L; TCE = 5 μ g/L; PCE = 5 μ g/L and Toluene = 150 μ g/L).

Shaded area indicates that data are not yet available.

30747/Rpts/2000AnMoRe (2/1/02/mc)



⁽²⁾ Concentrations of constituents are measured in micrograms per liter (µg/L).

⁽³⁾ Data were collected in September 1997 by the EPA and WDIG. The first September column is the EPA's data and the second column is the WDIG's data.

⁽⁴⁾ Monitoring wells installed in January 2001.

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

TABLE 4.6

IN-BUSINESS AIR MONITORING FREQUENCY IN 2000 WASTE DISPOSAL, INC. SUPERFUND SITE

SITE	SAMPLE I.D.	COMPANY NAME	ADDRESS		SAMPLE DATES					
AREA	SAMPLE I.D.	COMPANT NAME	ADDRESS	1/31/00	4/17/00	8/21/00	11/20/00			
	WDI-IBM-24	C&E Die & Fab	12637B Los Nietos Rd.	X	X	X	X			
2	WDI-IBM-24Amb	C&E Die & Fab (Ambient Air Sample)	12637B Los Nietos Rd. (outside building)	X	х	X	х			
5	WDI-IBM-50	Brothers Machine and Tool	9843 Greenleaf Ave.	x	Х	X	X			
7	WDI-IBM-49	Ambient Air Sample ⁽¹⁾	Southeast Corner of Los Nietos Rd. and Greenleaf Ave.	X	Х	Х	х			
	WDI-IBM-03	Stansell Brothers	12635E Los Nietos Rd.		Х	Х	X			
8	WDI-IBM-24B	Buffalo Bullet	12637A Los Nietos Rd.	X	X	X	X			
8	WDI-IBM-37	Durango Designer	12803 Los Nietos Rd.			X	X			
	WDI-IBM-41	H&H Contractors	12811F Los Nietos Rd.	X	Х	X	Х			
(1)	WDI-IBM-41	H&H Contractors	12811F Los Nietos Rd.	X		X 56/Rpts/2000AnN				

(1) Southeast corner of Area 7 near corner of Greenleaf Avenue and Los Nietos Road.



TABLE 4.7

INTERIM THRESHOLD SCREENING LEVEL EXCEEDANCES DURING 2000 IN-BUSINESS AIR MONITORING WASTE DISPOSAL, INC. SUPERFUND SITE

AREA	COMPANY NAME	SAMPLE I.D.	NO. OF SAMPLE ROUNDS PERFORMED IN 2000	SAMPLE DATE WITH EXCEEDANCE	CONSTITUENT DETECTED ABOVE ITSL	INDOOR AIR THRESHOLD LIMIT (ppb)	CONCENTRATION (ppb)
	10/27D I			1/00	Acetone	312	810(1)
	12637B Los Nietos Road	IBM-24	4	4/00	Acetone	312	1.100 ⁽¹⁾
2				11/00	Acetone	312	510 ⁽¹⁾
-	12637B Los Nietos Road (Ambient)	IBM-24 AMB	4	11/00	Benzene	2.0	2.1
5	9843 S.	IBM-50	4	1/00	Benzene	2.0	2.1 ⁽²⁾
,	Greenleaf	IDIVI-30	+	2.0	2.6 ⁽²⁾		
7	Ambient Air	IBM-49	4	11/00	Benzene	2.0	2.3
				4/00	Acetone	312	2.000(3)
	10/2551			4/00	Benzene	2.0	6.3 ⁽⁴⁾
	12635E Los Nietos Road		3	8/00	Acetone	312	720 ⁽⁴⁾
	ractos roda			0/00	Benzene	2.0	5.2 ⁽⁴⁾
				11/00	Benzene	2.0	7.4 ⁽⁴⁾
8	12637A Los Nietos Road	IBM-24B	4	11/00	Benzene	2.0	2.3
v	12803 Los Nietos Road	IBM-37	2	11/00	Benzene	2.0	2.4
				1/00	Benzene	2.0	$2.2^{(5)}$
	12811F Los			4/00	Benzene	2.0	3.8 ⁽⁵⁾
	Nietos Road	IBM-41	4	8/00	Benzene	2.0	2.4(5)
				11/00	Benzene	2.0	5.2 ⁽⁵⁾

(1) Acetone and MEK are voluntarily used by this business.

(2) Diesel fuel is used in vehicles at this business.

(3) Acetone is routinely used by this business.

(4) Kerosene, which may contain benzene, is used by this business.

(5) Several gasoline cans are stored in the building.

ppb = parts per billion



TABLE 4.8 1998-2000 SUMMARY OF TREND DATA FOR IN-BUSINESS AIR SAMPLE LOCATIONS FOR ACETONE, BENZENE, ETHYLBENZENE, m- & p-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE

WASTE DISPOSAL, INC. SUPERFUND SITE

Page 1 of 2

SAMPLE	SAMPLE				19	998				19	199		2000 Page 1 of 2				
NUMBER	LOCATION	CONSTITUENTS®	Feb	Mar	Apr	2ndQ	3rdO	4thQ	IstO	2ndQ	3rdQ	4thQ	IstQ	2ndQ	3rdQ	4thQ	
		Acetone	1,900		<u> </u>	<u>`</u>	270	290	750	640	-		<u> </u>	2,000	720	290	
		Benzene	4.6				2.3	4.7	6.6	6.4				5.3	5.2	7.4	
}		Ethylbenzene	5.8				1.8	2.5	7	11				4.4	4.7	4.1	
		m- & p-Xylene	24				7.0	8.2	25	44				17	17	16	
IBM-03	12635 Los Nietos	Methane	3.1				3.5	3.2	3.9	2.8				2.7	3.2	3.2	
}	Road	PCE	2				ND	ND	ND	ND				ND	ND	0.94	
		TCE	ND				ND	ND	ND	ND				ND	ND	ND	
		Toluene	45				12	15	48	63				63	51	32	
l	_	Vinyl Chloride	ND				ND	ND	ND	ND				ND	ND	ND	
		Acetone				12		30	24	24	16						
	ļ	Benzene				ND		9.4	2.0	1.4	1.1						
		Ethylbenzene				ND		ND	ND	ND	ND					1	
	10622 1 17 .	m- & p-Xylene				1.3		2.2	3.1	3.4	1.3						
IBM-03B	12633 Los Nietos	Methane		L		2.3		4.1	3.8	2.9	1.9						
	Road	PCE				ND		ND	ND	ND	ND						
		TCE				ND		ND	ND	ND	ND						
		Toluene				2.6		4.9	6.3	5.6	3.3						
		Vinyl Chloride				ND		ND	ND	ND	ND						
		Acetone	27	5.9	13	9.3	12	20	45	19	22	880	810	1,100	23	510	
	1	Benzene	1.4	1.0	1.0	ND	ND	1.7	28	ND	ND	ND	ND	ND	ND	ND	
		Ethylbenzene	NĐ	ND	ND	ND	ND	ND	2.3	ND	SD	1.2	0.9	ND	ND	ND	
	12637B Los Nietos	m- & p-Xylene	2.6	1.1	ND	1.8	1.1	2.0	9.6	1.7	1.9	4.3	3.3	2.0	1.1	4.2	
IBM-24	Road	Methane	2.8	2.5	2.6	2.2	2.9	3.3	3.2	2.4	1.8	3.0	2.5	3.0	2.5	3.6	
		PCE	0.7	ND	2.1	4.7	ND	ND	ND	ND							
ļ		TCE	ND	ND	ND	1.1	ND	ND	ND	ND							
		Toluene	9.3	3.2	2.9	14	3.4	4.7	6.7	2.3	17	9.4	7	8.3	3.2	6.9	
		Vinyl Chloride	ND	ND	NĐ	ND	ND	ND	ND	ND	ND	3.1	ND	ND	ND	ND	
		Acetone	12	17	8.9	11	8	8.9	12	34	15	14	10	19	26	19	
		Benzene	1.2	1.1	ND	ND	2.7	1.7	2.4	1.6	SD	1.0	ND	1.7	ND	2.3	
		Ethylbenzene	ND	ND	NĐ	ND	ND	ND	1.8	6.0	ND	ND	ND	1.5	ND	0.8	
	12637A Los Nietos	m- & p-Xylene	1.7	1.4	ND	1.3	1.0	1.3	4.2	28.0	1.3	1.7	1.2	6.0	1.0	2.9	
IBM-24B	Road	Methane	3.8	3.3	3.9	2.7	3.5	3.0	4.4	2.9	2.5	4.5	3.2	3.2	4.0	4.4	
	Road	PCE	0.6	ND	0.9	ND	ND	ND	ND	0.8	3.6	ND	ND	ND	ND	1.0	
		TCE	ND	ND	ND	ND	ND	ND	1.0	ND	ND	ND	ND	ND	ND	ND	
1		Toluene	4.7	3.9	3.1	3.6	3.0	2.6	2.5	11	3.6	3.9	2.6	9.1	4.6	7.1	
L		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND _	ND	ND	ND	ND	ND	ND	ND	
		Acetone								12		28			98	130	
1		Benzene								1.3		0.9			ND	2.4	
ļ	i	Ethylbenzene								ND		0.7	415		ND	6.1	
	12803 Los Nietos	m- & p-Xylene								1.1		2.6		1	2.7	22	
IBM-37	Road	Methane								2.1		2.0			2.1	3.6	
ł	I KOMU	PCE								ND		ND			ND	ND	
		TCE								12.0		42.0			ND	ND	
l		Toluene								5.0		6.4			16.0	170.0	
i		Vinyl Chloride							L	ND		ND			ND	ND	

⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (ppbv).



ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold numbers show concentrations that exceeded the Indoor Air Interim Threshold Screening Levels (ITSLs).

ITSLs: acctone (156 ppbv); benzene (1.0 ppbv); ethylbenzene (245 ppbv); m- & p-xylenes (71.4 ppbv); methane (6,250 ppmv); PCE (5.3 ppbv); TCE (4.1 ppbv); toluene (106 ppbv) and vinyl chloride (0.125 ppbv).

Shaded area indicates that data was not collected due to access problems.

TABLE 4.8

1998-2000 SUMMARY OF TREND DATA FOR IN-BUSINESS AIR SAMPLE LOCATIONS FOR ACETONE, BENZENE, ETHYLBENZENE, m- & p-XYLENES, METHANE, PCE, TCE, TOLUENE AND VINYL CHLORIDE WASTE DISPOSAL, INC. SUPERFUND SITE

(Continued)

Page 2 of 2

SAMPLE	SAMPLE				19	998				19	99		2000				
NUMBER	LOCATION	CONSTITUENTS	Feb	Mar	Apr	2ndO	3rdO	4thO	1stO	2ndO	3rdO	4thO	1stO	2ndO	3rdO	4thO	
		Acetone	46	ND	37	53	50	94	200	340	490	430	100	75	42	100	
		Benzene	4.1	ND	4.6	5.8	7.2	5.7	3.9	3.2	2.6	2.4	2.2	3.8	2.4	5.2	
		Ethylbenzene	6.0	ND	3.2	6.3	4.8	4.6	5.1	8.2	6.3	5.9	2.9	3.4	2.7	6.2	
		m- & p-Xylene	24	ND	12	23	17	17	20	32	32	22	12	13	11	23	
IBM-41	12811E Los	Methane	3.5	ND	3.1	2.4	3.1	2.8	2.8	2.2	1.5	1.6	1.1	1.9	3.1	3.0	
1	Nietos Road	PCE	3.0	ND	ND	ND	1.4	11.0	22.0	34.0	ND	ND	ND	ND	ND	2.1	
		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1		Toluene	64	ND	34	48	34	52	91	61	180	140	30	24	28	44	
_	<u> </u>	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
<u> </u>		Acetone	17	8	6	66	15	25	110	24	20	35	ND	23	13	22	
}		Benzene	1.0	1.1	ND	1.1	1.6	2.1	2.1	1.2	16	1.0	ND	ND	1.0	2.6	
		Ethylbenzene	ND	ND	0.7	ND	ND	2.5	1.1	ND	ND	ND	ND	1.1	ND	3.9	
1	9843S. Greenleaf Avenue	m- & p-Xylene	1.4	1.4	2.5	1.4	1.8	11	4.4	1.1	1.6	1.7	1	4.7	0.7	20	
IBM-50		Methane	2.7	2.5	2.6	2.1	3.0	2.8	2.9	2.3	1.8	2.2	1.7	2.0	2.6	3	
		PCE	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.7	
		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Toluene	3.8	3.9	2.7	3.9	5.3	8	6.2	2.6	5.7	2.8	2.5	5.4	2.6	9.2	
		Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Acetone		5.6	3.7	8.8	6.7	8.3	9.4	290	9.5	26	9.2	33	39	11	
	1	Benzene		1.2	ND	ND	ND	1.8	1.7	1.0	1.1	ND	ND	ND	ND	2.1	
		Ethylbenzene		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.8	
	Ambient Air	m- & p-Xylene		ND	0.8	1.2	0.9	1.3	2.3	2.2	1.4	1.7	0.9	3.0	ND	2.7	
IBM-24AMB	(12637B Los	Methane		2.9	2.7	2.1	2.9	3.6	4.0	3.4	2.5	3.0	2.6	2.5	2.5	5.2	
	Nietos Road)	PCE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.4	
		TCE		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NĐ	ND	
		Toluene		3.2	2.1	2.5	6.9	2.6	4.8	3.2	3.0	3.2	2.2	3.8	2.7	5.9	
		Vinyl Chloride		ND	ND	ND	ND	ND	ND	ND_	ND	ND	ND	ND	ND	ND	
ļ		Acetone	21	4.6	5.3	4.3	5.6	24	22	7.7	12	13	6.1	7.2	11	36	
		Benzene	390	1.5	ND	1.1	1.4	1.5	SD	1.1	1.3	1.0	0.8	ND	ND	2.3	
		Ethylbenzene	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.9	
	Ambient Air	m- & p-Xylene	2,900	1.9	1.3	1.6	3.0	1.8	2.5	1.5	3.0	1.6	1.5	0.9	0.9	3.3	
IBM-49	(Area 7)	Methane	2.6	2.5	2.4	2.1	2.5	2.7	2.5	2.5	1.8	2.1	1.9	12.0	2.0	2.8	
	(Area /)	PCE	ND	ND	1.1	ND	ND	ND	1.7	ND	ND	ND	ND	ND	ND	0.7	
		TCE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Toluene	6,700	4.9	2.9	4.2	3.7	3.1	5.2	2.7	4	3.0	2.4	1.6	3.1	6.9	
<u></u>	<u> </u>	Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND 30717 Perc/	ND	ND	

30747/Rpts/2000AnMoRe(2:1/02/mc)



⁽¹⁾ Except for methane concentrations measured as parts per million volume (ppmv); concentrations of constituents were measured in parts per billion volume (pphv).

ND = Concentration of the constituent was not detected above the laboratory's reporting limit.

Bold numbers show concentrations that exceeded the Indoor Air Interim Threshold Screening Levels (ITSLs).

ITSLs: acctone (156 ppbv); benzene (1.0 ppbv); ethylbenzene (245 ppbv); m- & p-vylenes (71.4 ppbv); methane (6,250 ppmv), PCE (5.3 ppbv); TCE (4.1 ppbv); toluene (106 ppbv) and vinyl chloride (0.125 ppbv).

Shaded area indicates that data was not collected due to access problems.

TABLE 4.9

1999 - 2000 SUMMARY STORMWATER ANALYTICAL DATA WASTE DISPOSAL, INC. SUPERFUND SITE

PARAMETER (mg/L)	CAL-EPA ⁽¹⁾ MCL (mg/L)	U.S. EPA ⁽²⁾ MCL (mg/L)	1/25/99	2/21/00
Oil and Grease			1.9	ND
pH (pH units)		6.5-8.5 ⁽³⁾	7.7	7.9
Specific Conductance (µmhos/com)			820	330
Total Suspended Solids	75		66	33
Antimony		0.006	ND	ND
Arsenic		0.05	0.011	ND
Barium	1	2	0.095	0.044
Beryllium		0.004	ND	ND
Cadmium	0.01	0.05	ND	ND
Chromium (Total)	0.05	0.10	0.014	ND
Cobalt			ND	ND
Copper	1.0(3)	1.3 ⁽⁴⁾	0.044	0.03
Lead	0.05	0.015	0.032	0.014
Mercury	0.002	0.002	ND	ND
Molybdenum			0.017	ND
Nickel		0.1	ND	ND
Selenium	0.01	0.05	ND	ND
Silver	0.05	0.1(4)	ND	ND
Thallium		0.002	ND	ND
Vanadium			0.03	ND
Zinc	5.0(3)	5.0 ⁽⁴⁾	0.1	0.059

30747/Rpts/2000AnMoRe (2/1/02/mc)

(3) U.S. EPA Secondary Maximum Contaminant Level.

ND = Not detected at or above laboratory detection limits.

-- = Not established.

Shaded area indicates an exceedance of either the Cal-EPA or the U.S EPA MCL.



California EPA Maximum Contaminant Level, California Code of Regulations, Title 22, Article 8, Section 64473, 1993.

U.S. EPA Maximum Contaminant Level, 40 Code of Federal Regulations, 141.60.

⁽⁴⁾ Secondary Drinking Water Standards Maximum Contaminant Level.

TABLE 5.1

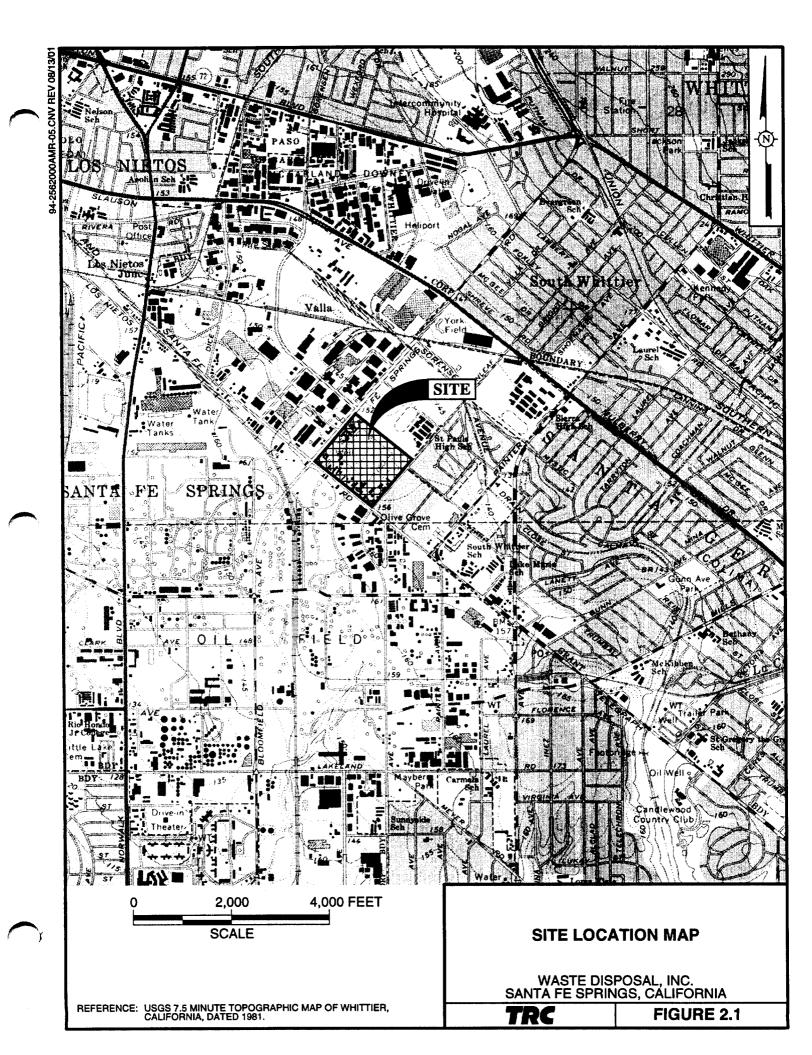
2000 SUMMARY OF QA/QC LABORATORY DATA EVALUATION WASTE DISPOSAL, INC. SUPERFUND SITE

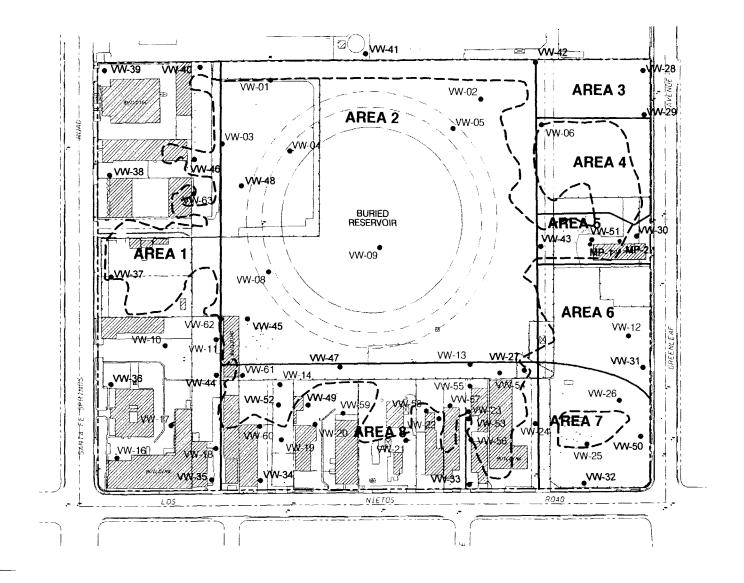
EVALUATION REQUIREMENTS	REMARKS/COMMENTS							
Detection Limits	Within acceptable limits.							
Accuracy	Within acceptable limits.							
Precision	Within acceptable limits.							
Completeness	The samples achieved the required 90% completeness.							
Container Type	The samples were collected using the required containers.							
Preservative	The samples were collected using the required preservatives.							
Analytical Holding Times	The samples were analyzed within the required holding times.							
Data Validation	Ten percent of the samples were validated and were within the acceptable limits, as per U.S. EPA Region 9 Function Guideline for the Validation of Organic Analyses.							

30747/Rpts/2000AnMoRe (2/1/02/mc)



FIGURES





LEGEND

SITE BOUNDARY

AREA BOUNDARY

--- SUMP BOUNDARY

MP-1
■ MONITORING PROBE

VW-16 • RI/FS VAPOR WELLS

VW-36 WDIG VAPOR WELL

VW-61 • EPA VAPOR WELL

NOT TESTED

0 200 400 FEET SCALE

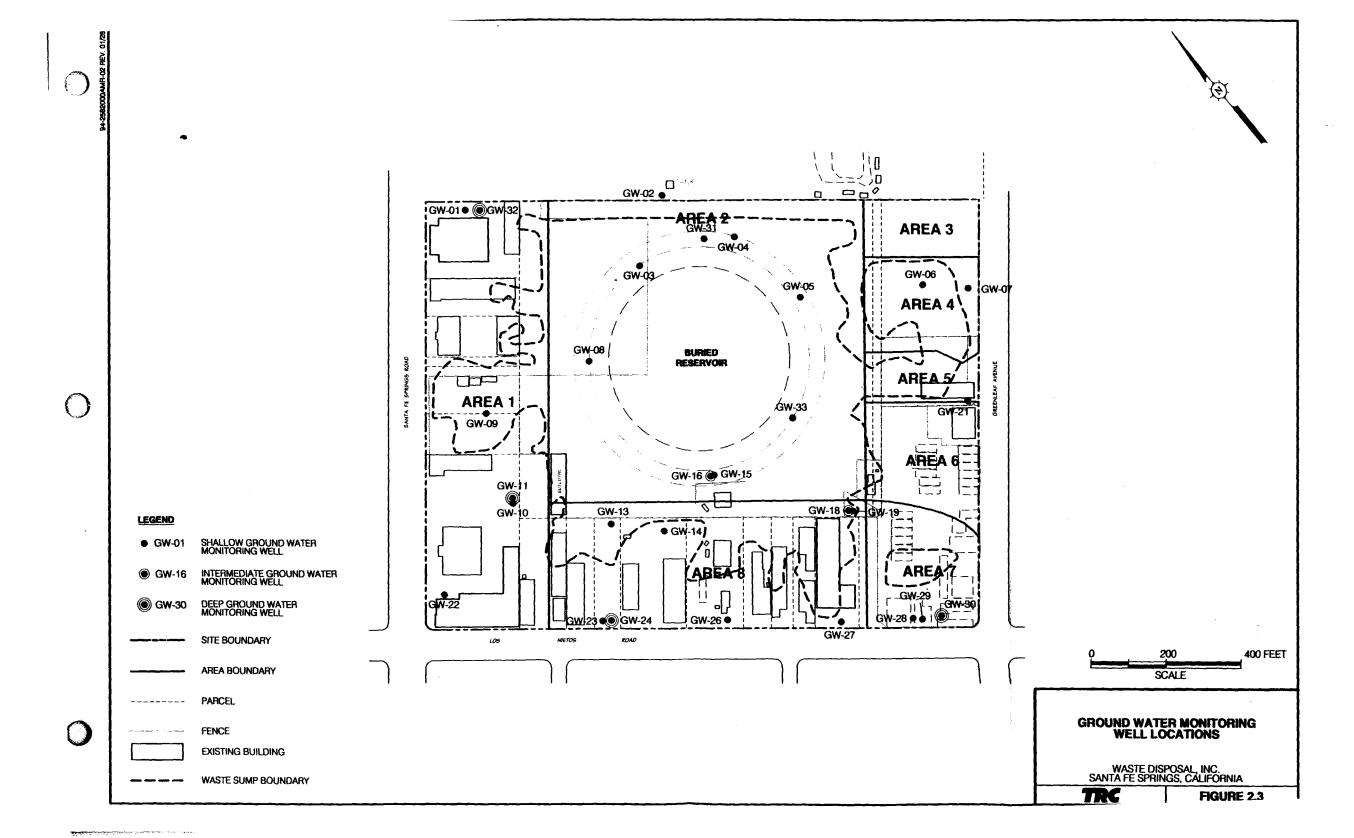
EXISTING VAPOR WELL NETWORK

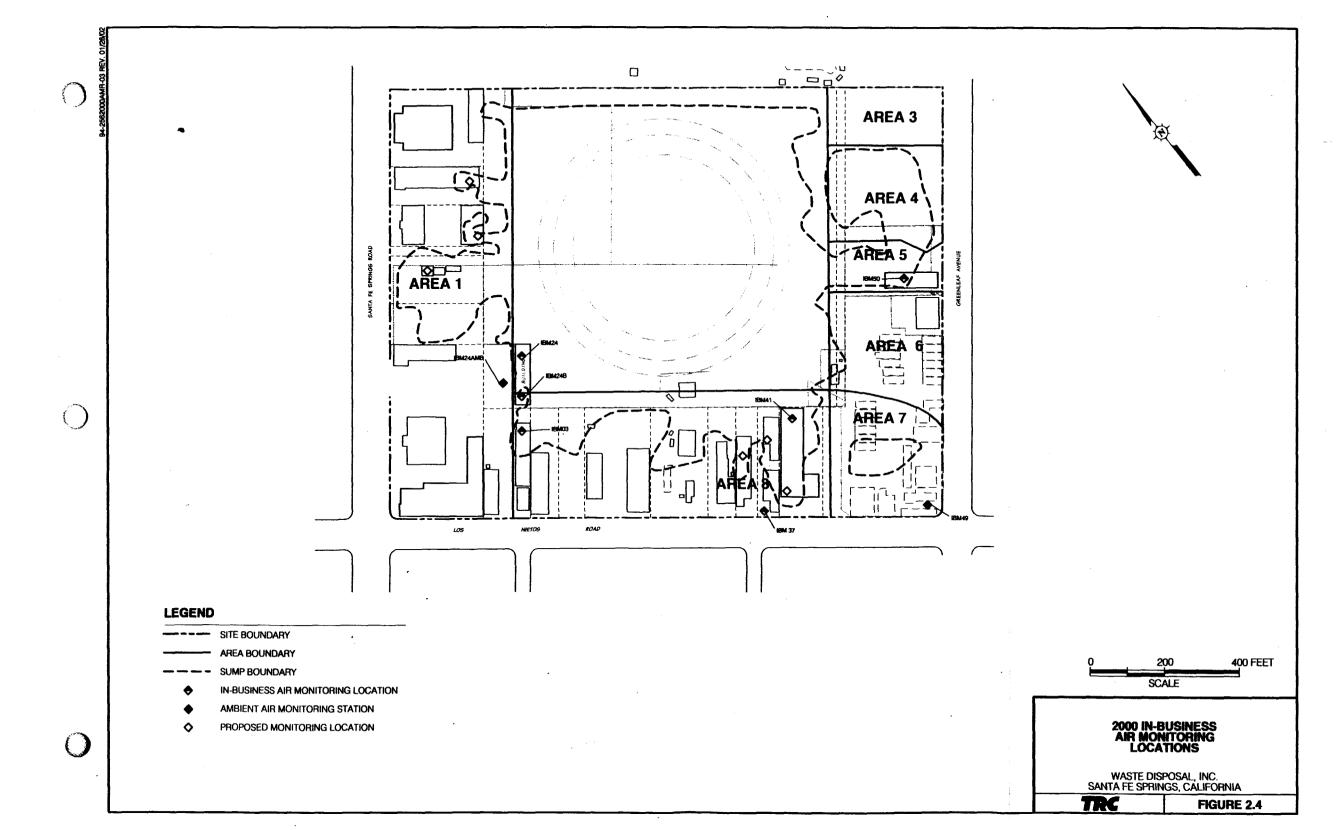
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

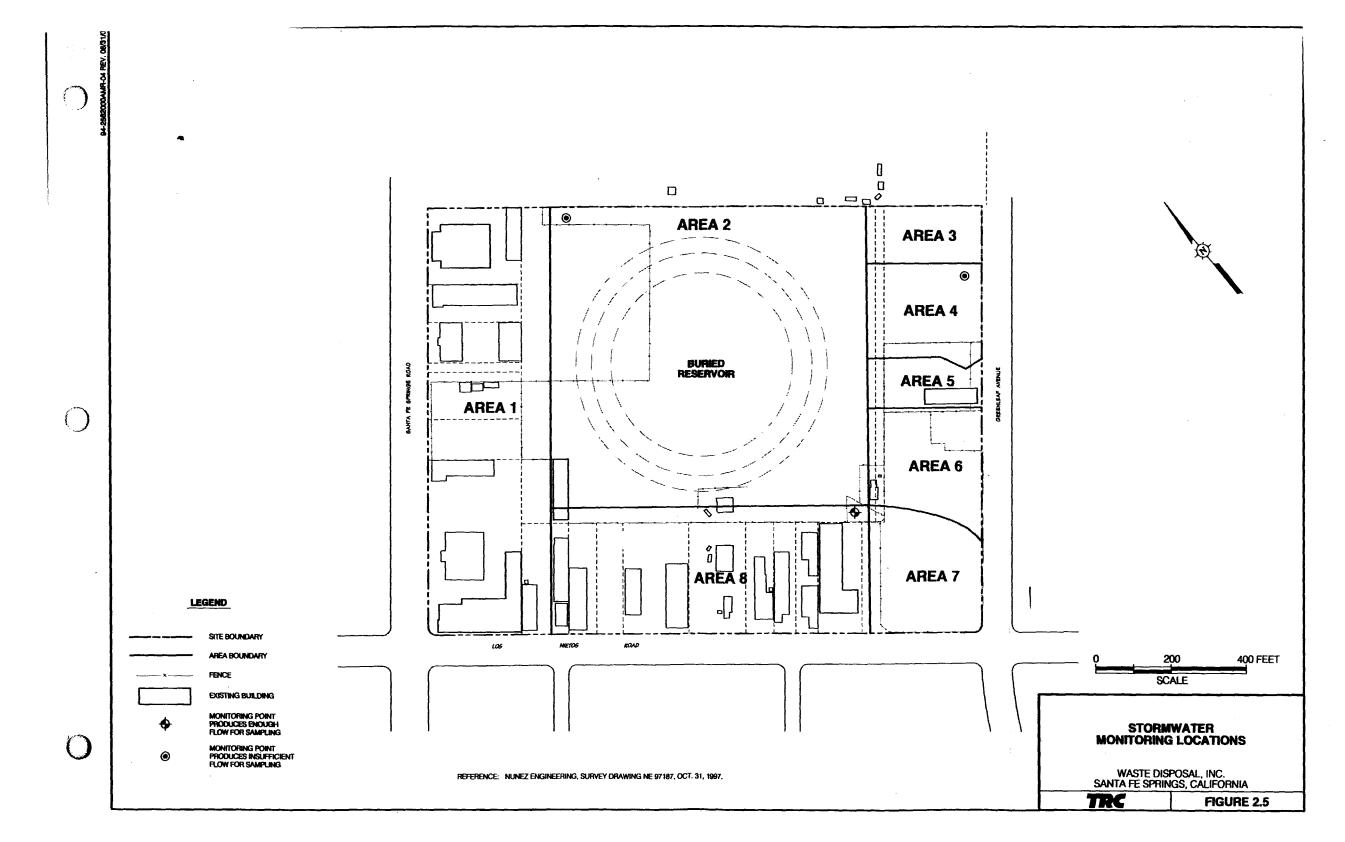
TRC

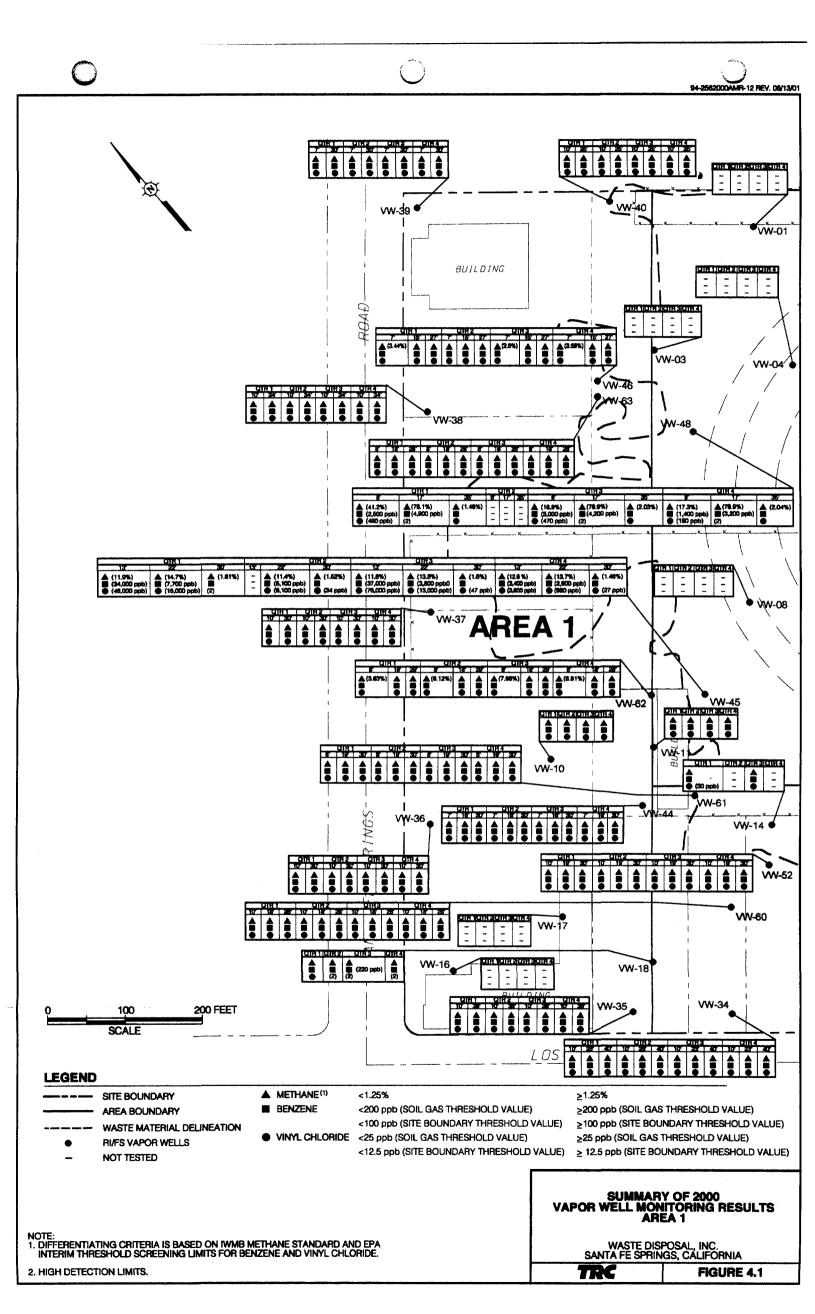
FIGURE 2.2

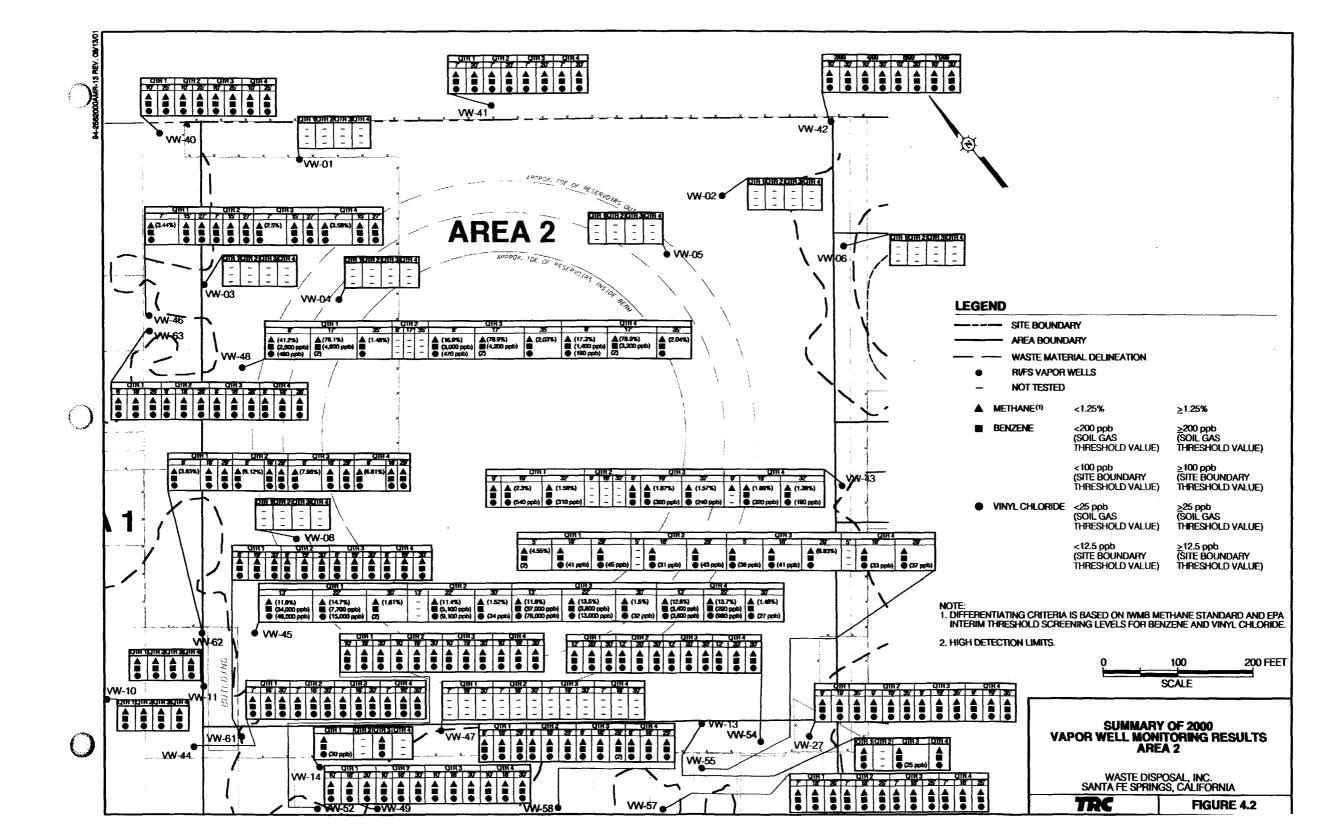
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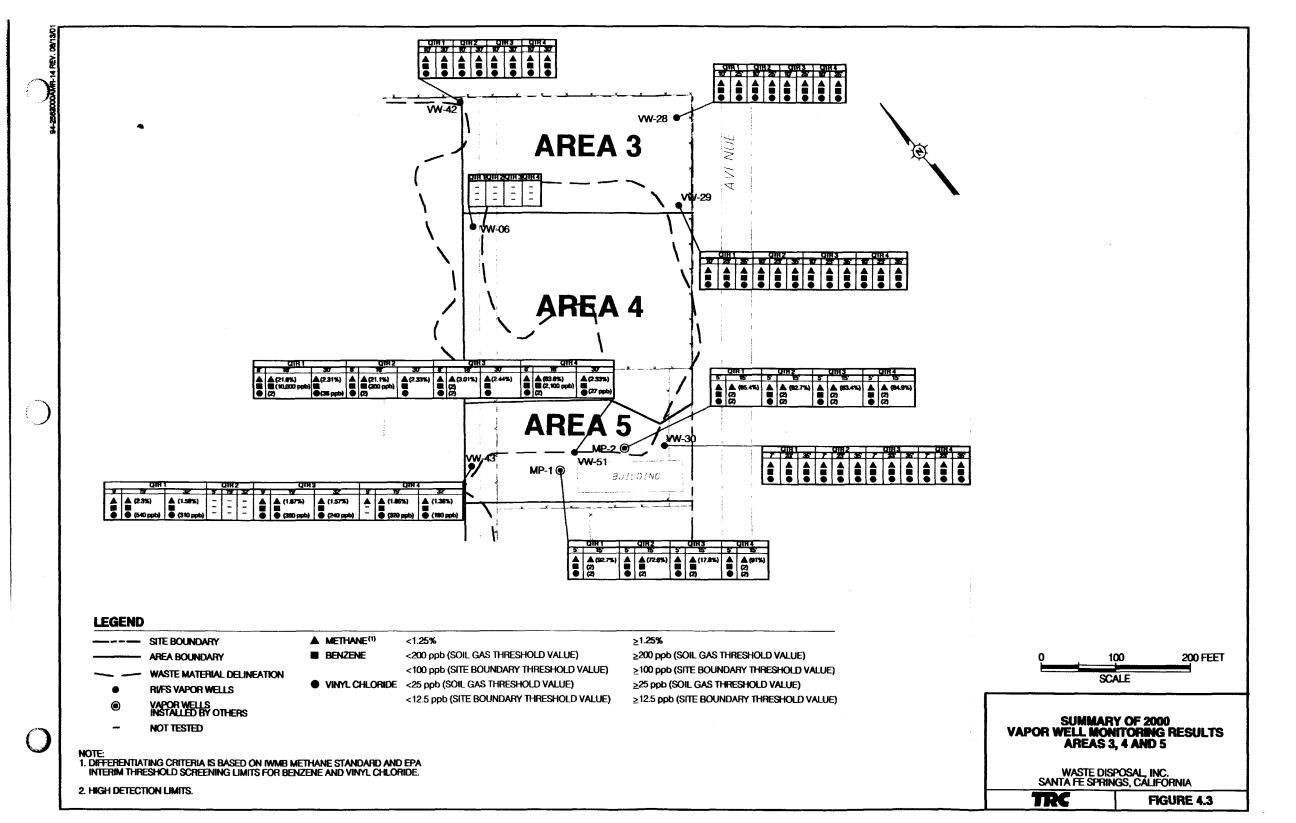


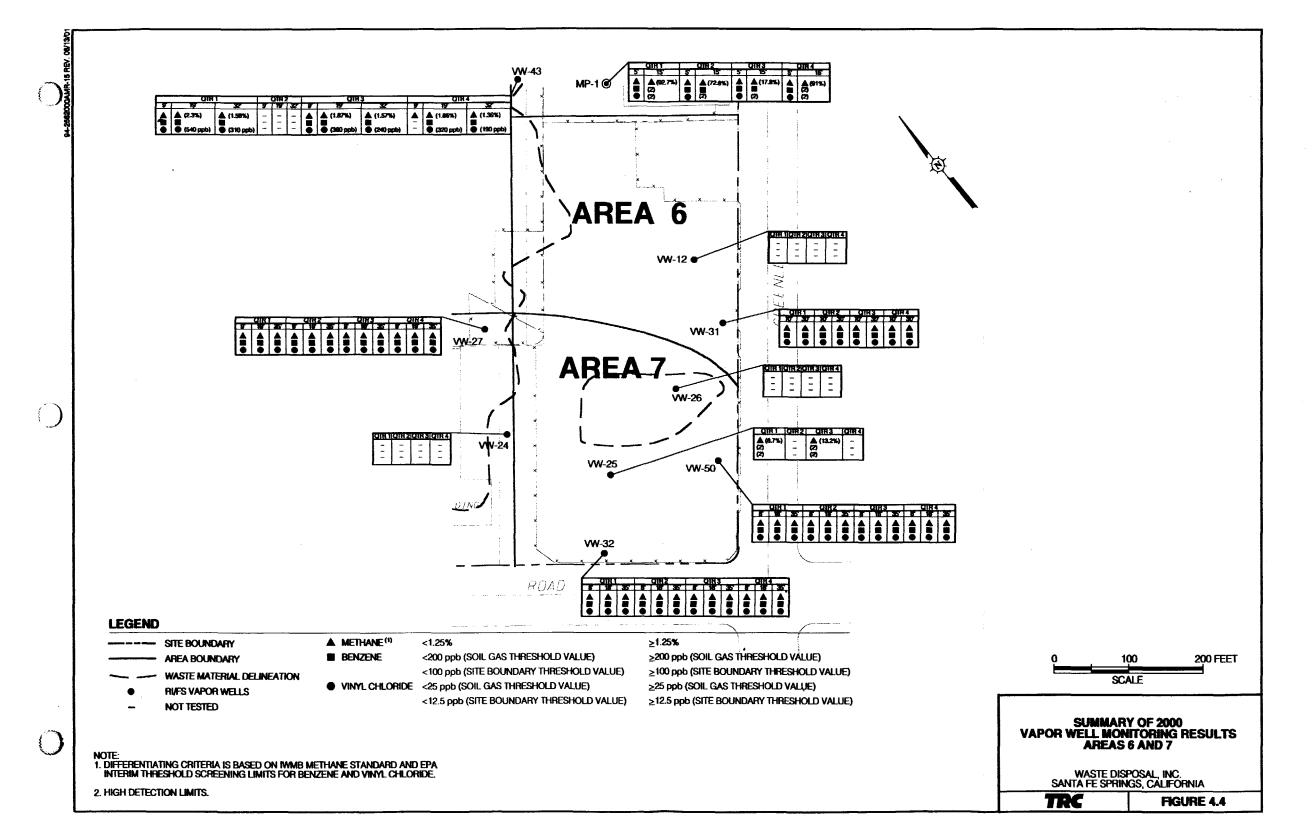


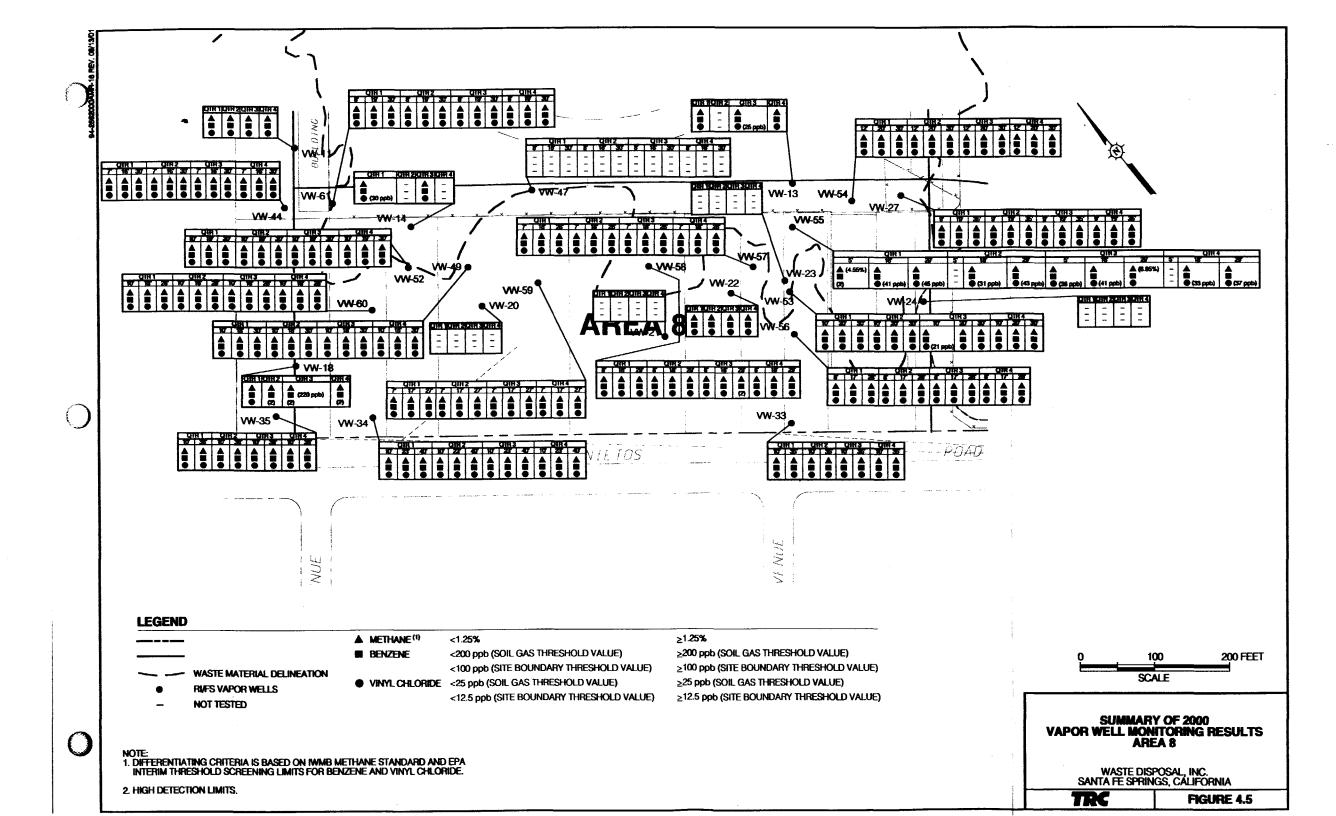


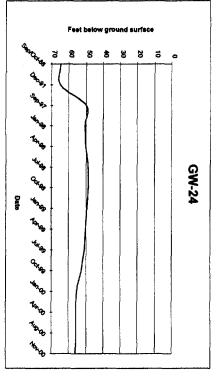


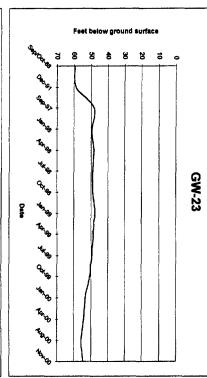


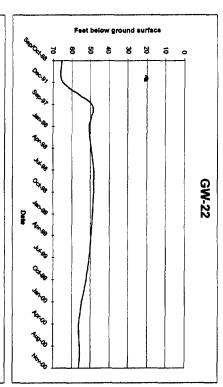


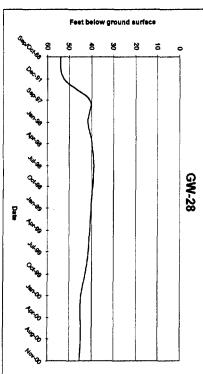


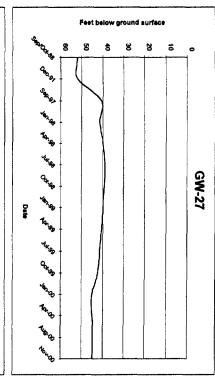


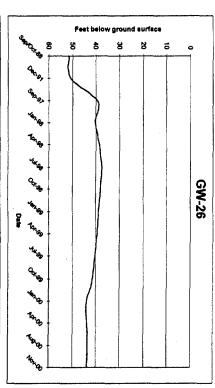


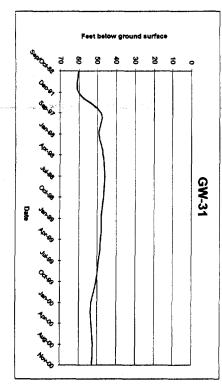


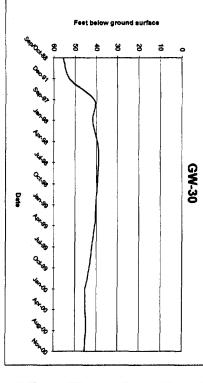


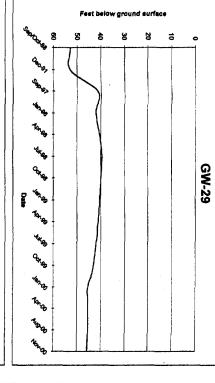








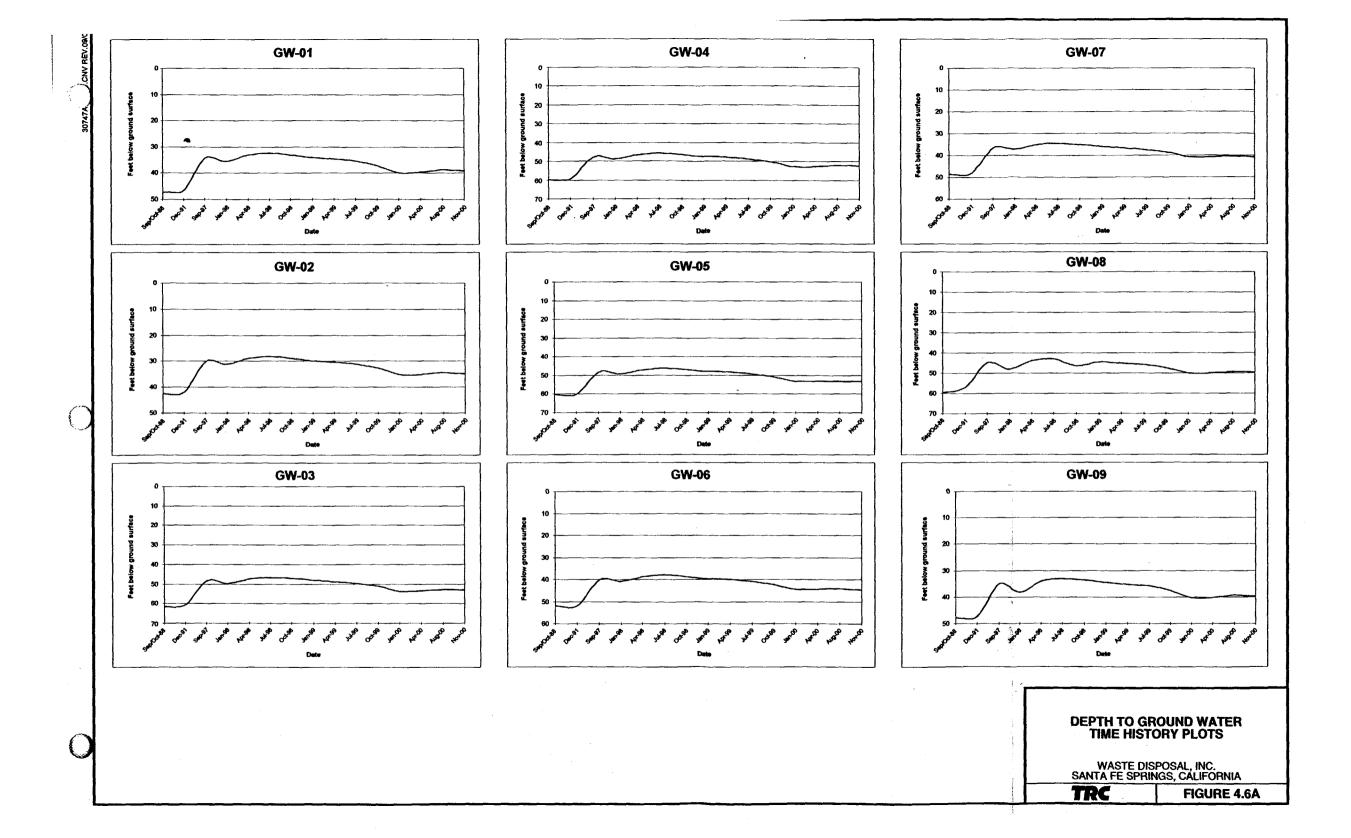


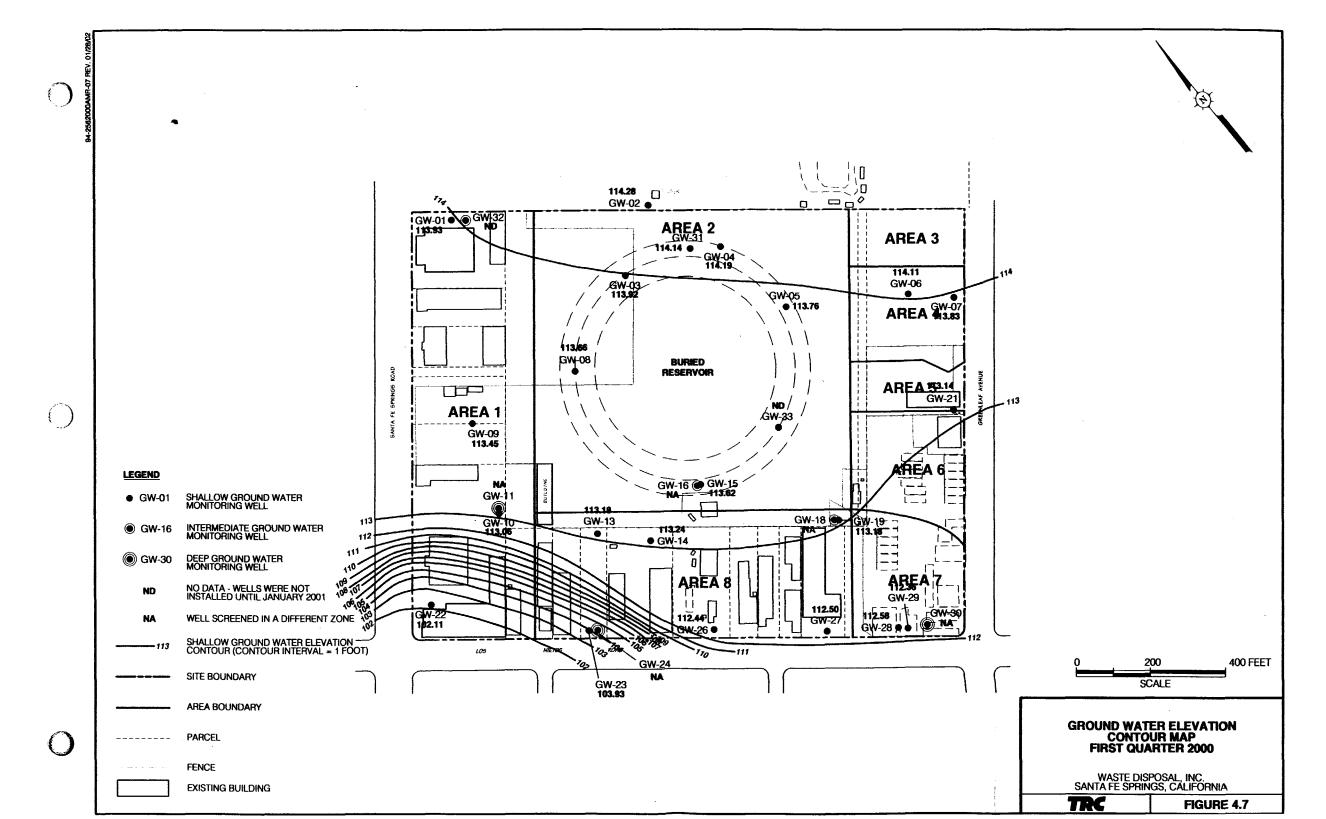


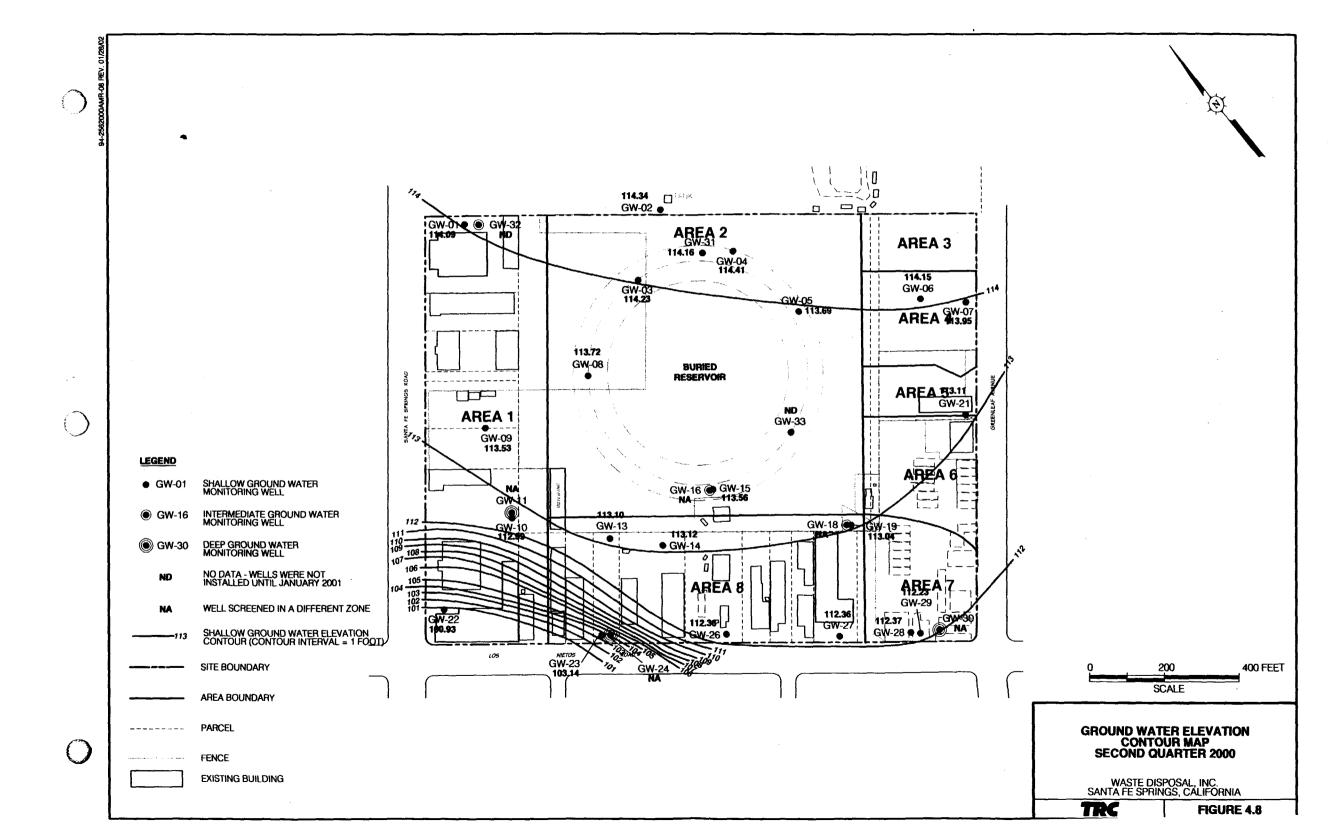
X

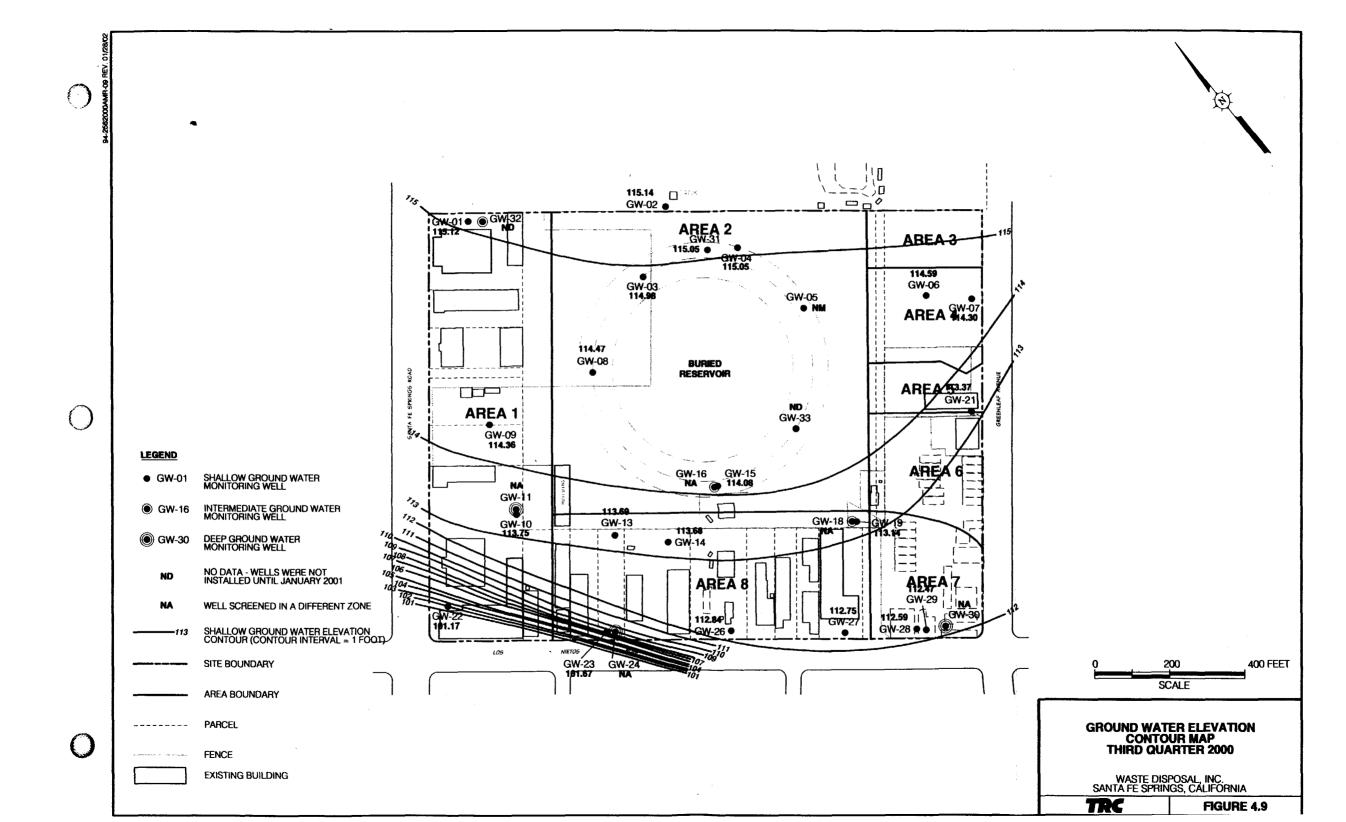
DEPTH TO GROUND WATER TIME HISTORY PLOTS

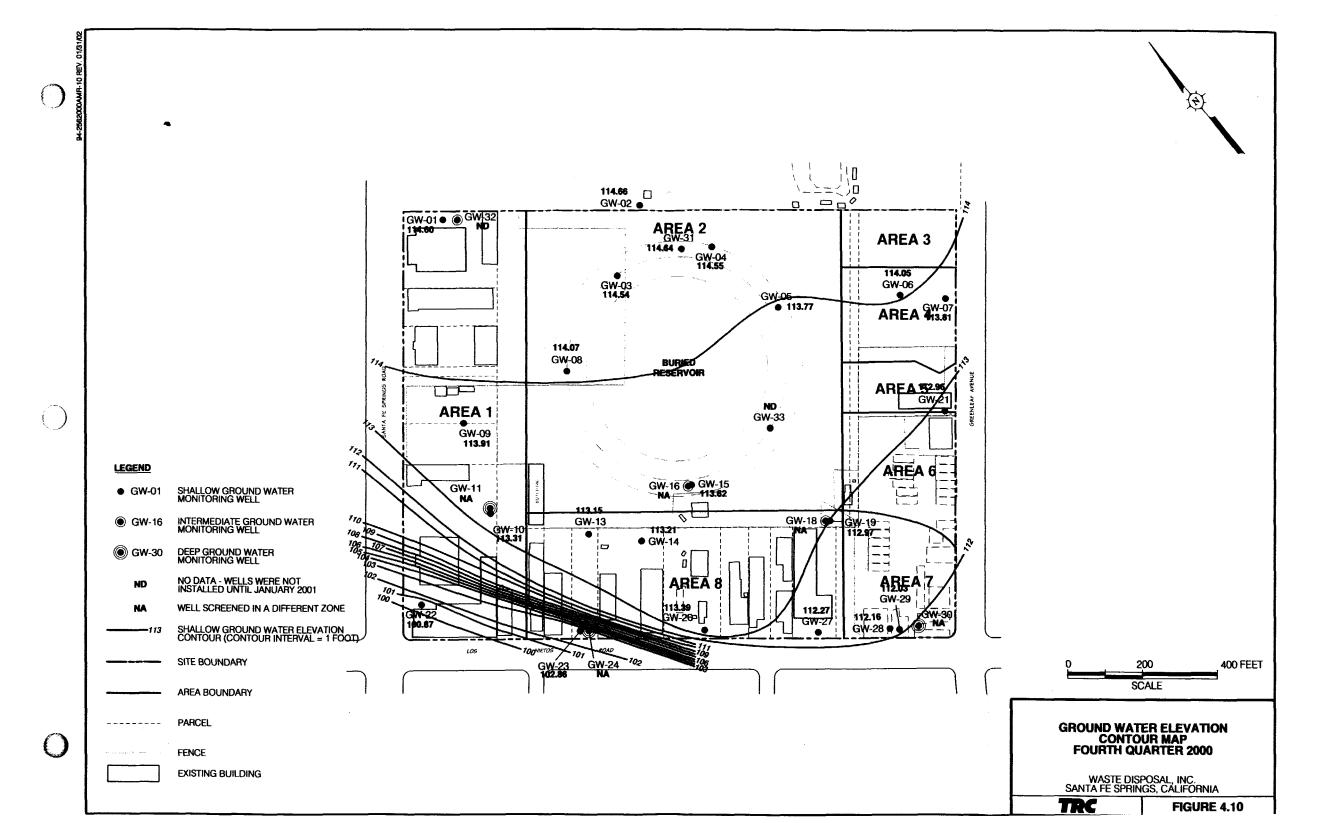
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA FIGURE 4.6C

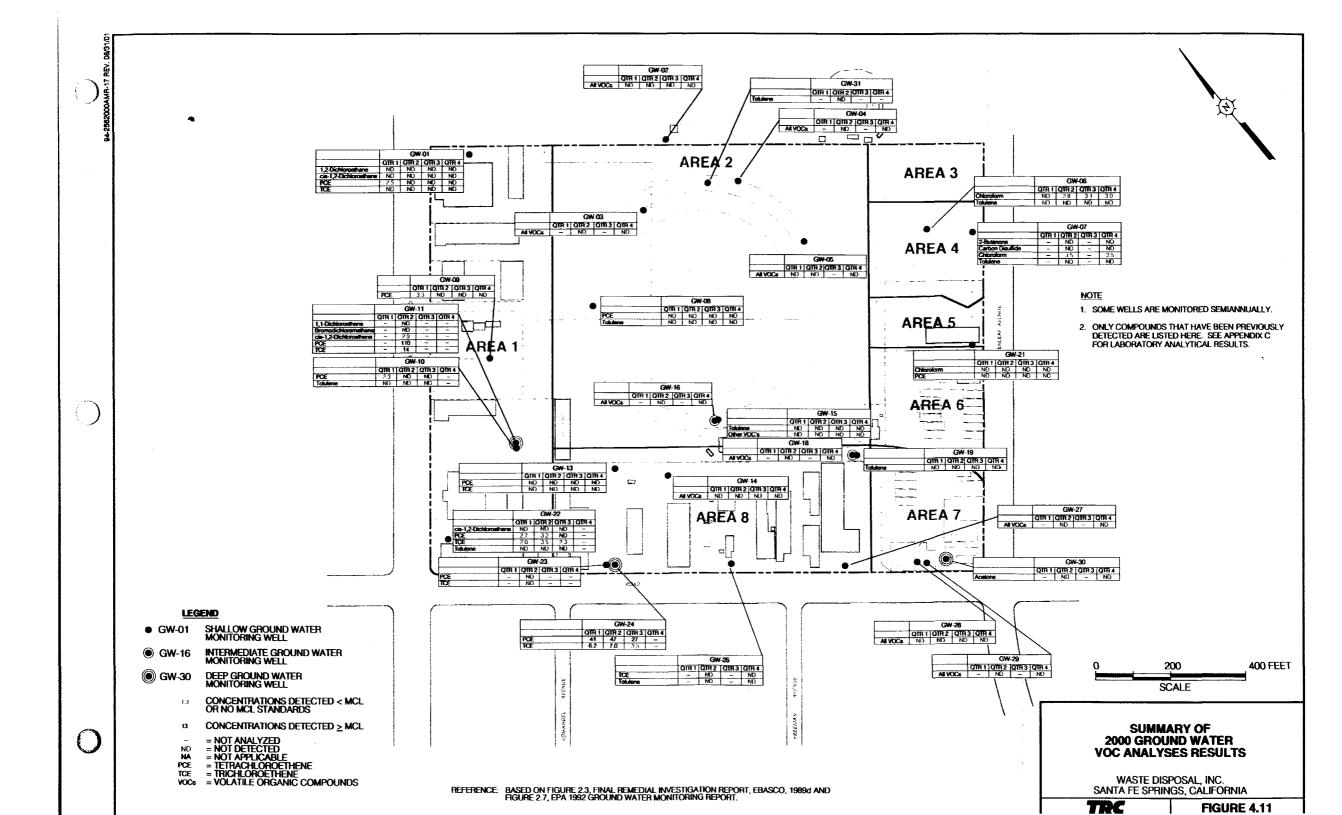


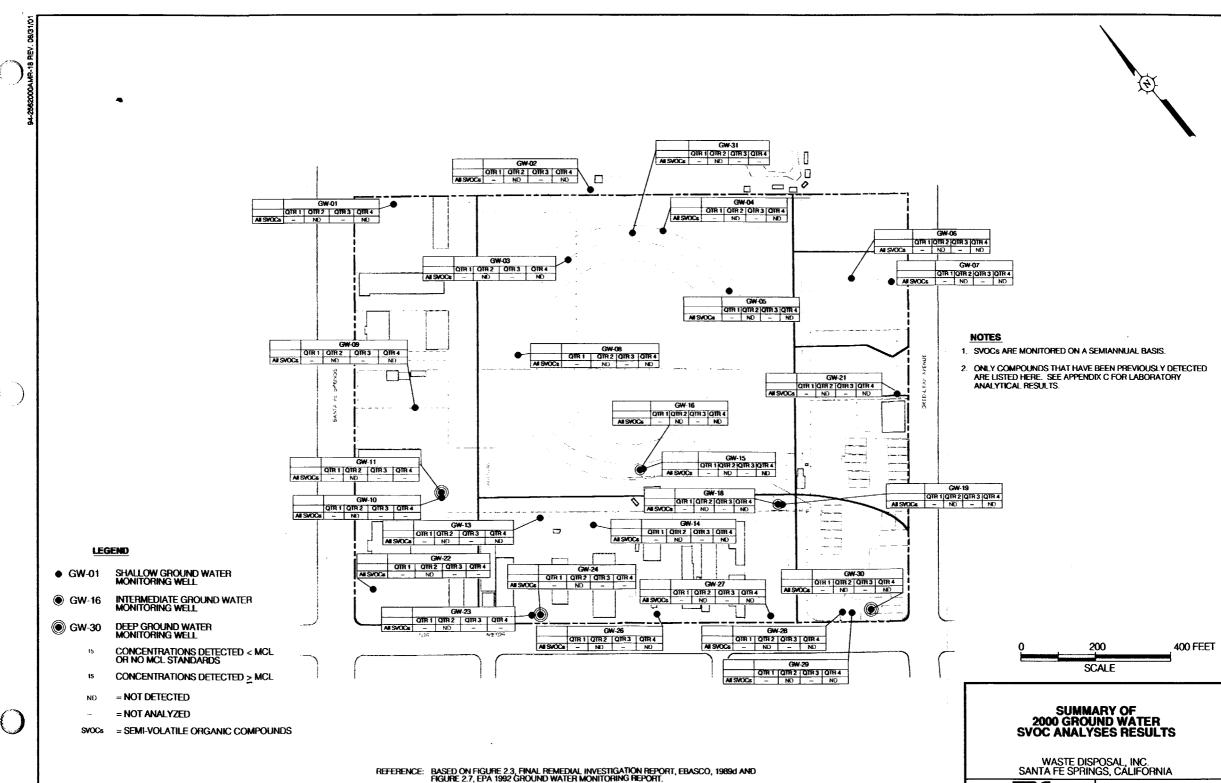






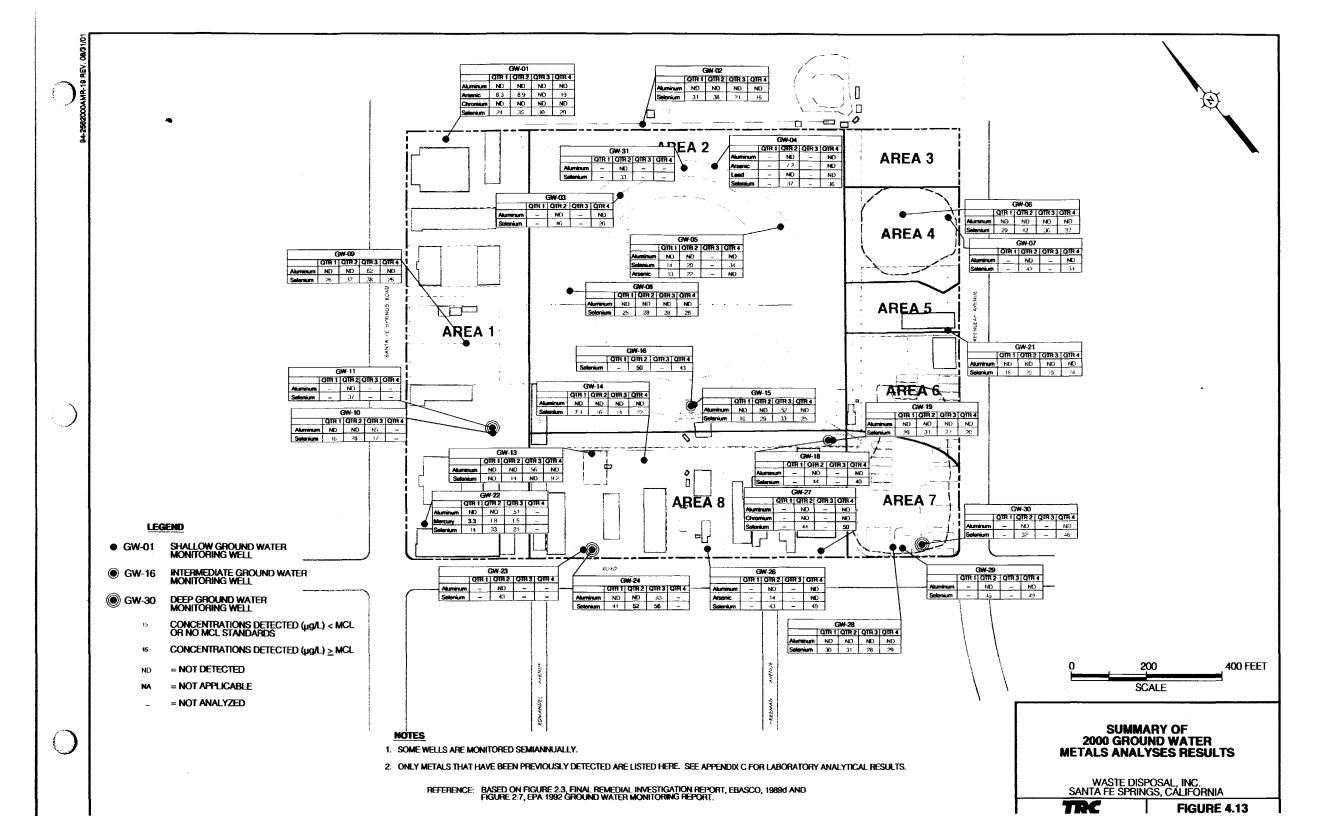


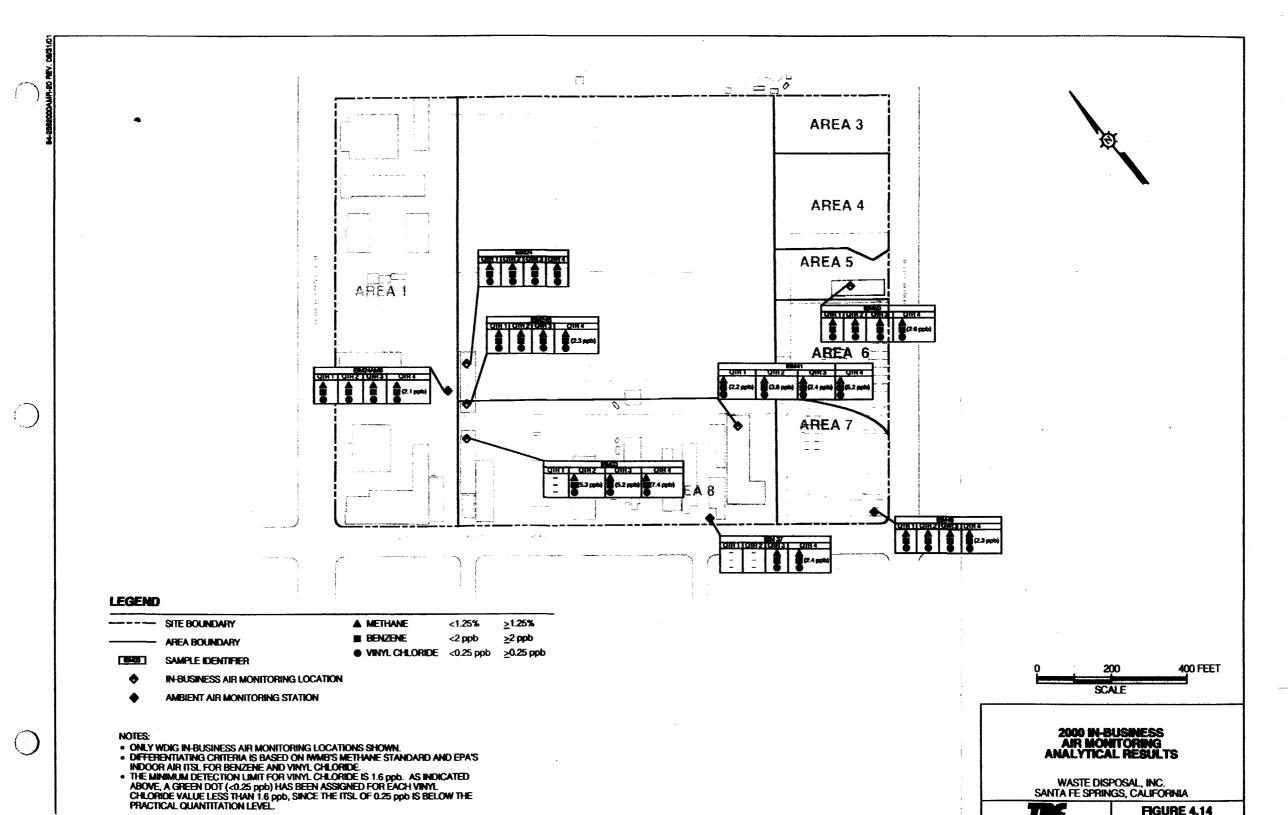




TRC

FIGURE 4.12





4

Well ID	Date	Methane (%)	VOC (ppm)
	Feb-98	0	0.2
	Apr-98	0	5.2
	Jul-98	0.1	30
VIM 04 05	Oct-98	0	21
VW-01-35	Feb-99	0	25.7
	Apr-99	0	10.2
	Aug-99	0.2	19.3
	Oct-99	0	2.3
	Feb-98	0.3	0.8
	Apr-98	0.5	4.7
	Jul-98	0	28.4
	Oct-98	0	NM
VW-02-35	Feb-99	0	1.6
	Apr-99	0.1	3.0
	Aug-99	0	4.8
	Oct-99	0	31.7
	Feb-98	1.2	22.3
-	Apr-98	1.4	1.5
	Jul-98	0.6	33
	Oct-98	0.1	47
VW-03-35	Feb-99	0.1	26.2
	Apr-99	0	7.9
	Aug-99	0	3.7
	Oct-99	. 0.	3.2
	 A contract of the second contrac	r	*
	Feb-98		0
	Apr-98	34.8	28.8
	Jul-98	the state of the s	84
VW-04-23	Oct-98	8.3	54
	Feb-99	0.3	61.7
	Apr-99	0.6	13.3
	Aug-99	5.2	56.5
	Oct-99	12.2	8.5
	Feb-98	0.6	0.3
	Apr-98	. 0	4.5
	Jul-98		6.5
VW-05-29	Oct-98	0	NM
	Feb-99	0.1	1.1
	Apr-99	0.6	2.4
	Aug-99	0	2.0
	Oct-99	0	3
	Feb-98	4.5	0
	Apr-98	0.1	5.1
	Jul-98	0.1	NM
VW-06-34	Oct-98	0	NM
	Feb-99	0	2.1
	Apr-99	0	3.0
	Aug-99	0	6.0
	Oct-99	0	8.3

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	7.5
	Apr-00	0	1.1
	Aug-00	0	1.8
	Nov-00	0	1.2
VW-01-35	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.7
	Apr-00		0.5
	Aug-00	0	1.0
	Nov-00	0	1.8
VW-02-35	Feb-01		
	Apr-01		\$
	Jul-01		
	Oct-01	·	<u> </u>
	Jan-00	0	13.7
	Apr-00	0	1.0
	Aug-00	0	3.3
	Nov-00		4
VW-03-35	Feb-01	. 0	1.3
	Apr-01		*
	Jul-01		
	Oct-01		
-		10.0	50.0
	Jan-00	10.8 20.9	50.6 13.2
	Apr-00		33.4
	Aug-00		33.4
VW-04-23	Nov-00	1.1	34.3
	Feb-01		:
	Apr-01		
	Jul-01		
	Oct-01		I
	Jan-00	0	2.0
	Apr-00	0.3	1.1
	Aug-00	0	0.7
VW-05-29	Nov-00	<u> </u>	2.3
	Feb-01		-
	Apr-01		ļ
	Jul-01	 	ļ I
	Oct-01		ļ
	Jan-00	0	1.9
	Apr-00		0.4
	Aug-00	0	1.7
VW-06-34	Nov-00	0	3.3
	Feb-01		ļ
	Apr-01		
	Jul-01		ļ
	Oct-01		!

VW-08-35 Feb-98	Well ID	Date	Methane (%	;) VOC (ppm)
VW-08-35 Jul-98 John MM 0 6.0 Peb-99 John John Mr. Apr-99 John John John John John John John John		Feb-98	0.6	0
VW-08-35 Oct-98		Apr-98	0.4	6.6
VW-08-35 Feb-99 0 9.0 Apr-99 0 25.4 Aug-99 0 2.6 Oct-99 NM NM Feb-98 0.2 0 Apr-98 0.3 3.4 Jul-98 0.4 15 Oct-98 0 0 Feb-99 0 7.1 Apr-99 0 2.7 Oct-99 0 3.1 Feb-98 1.8 0 Apr-99 0 2.7 Oct-99 0 3.1 Feb-98 1.8 0 Apr-98 1.1 2.9 Apr-99 0 7.9 Aug-99 0.1 4.5 Oct-98 0 0 Feb-99 0 2.9 Apr-99 0.1 4.5 Oct-99 0.3 1.5 Feb-98 0 2.8 Feb-99 0 2.8 <		Jul-98	0	6.0
Feb-99	V/W 00 05	Oct-98	0	NM
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VW-13-31		Oct-99	0	1.5
VW-13-31		Feb-98	1.0	0
VW-13-31		Apr-98	0.7	1.9
VW-13-31 Oct-98 Peb-99 O.6 O.6 O.6 O.7 O.6 O.6 O.6 O.7 O.6 O.6 O.7 O.6 O.6 O.7				25.1
VW-13-31 Feb-99 0.6 18.3 Apr-99 1.1 2.4 Aug-99 0.2 1.7 Oct-99 0.6 1.7 Feb-98 0.4 4.1 Apr-98 0.4 14.1 Jul-98 0 6.6 Oct-98 0 37 Feb-99 0.3 11.1 Apr-99 0.3 NM	VW 42 04	1	†	· !
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VW-14-35				+
VW-14-35 Feb-98 0.4 4.1 Apr-98 0.4 14.1 Jul-98 0 6.6 Oct-98 0 37 Feb-99 0.3 NM				
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VW-14-35		ļ		
Feb-99 0.3 11.1 Apr-99 0.3 NM	VW-14-35			
Apr-99 0.3 NM				
				
		Aug-99		7.9
Oct-99 0.2 10.3				

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	2.9
	Apr-00	0	1.4
	Aug-00	0	0.5
VW-08-35	Nov-00	0	1.8
V W-08-35	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.5
	Apr-00	0	0.7
	Aug-00	0	1.5
3/34/ 40 05	Nov-00	0	1.1
VW-10-35	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0.4	2.1
	Apr-00	0.5	6.2
	Aug-00	0.7	0.8
	Nov-00	0.1	0.8
VW-11-35	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	3.3
	Apr-00	0	2.8
	Aug-00	0	1.4
	Nov-00	0	6.9
VW-12-34	Feb-01	<u> </u>	
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0.9	1.8
	Apr-00		2.2
	Aug-00		6.5
	Nov-00	0.2	2.9
VW-13-31	Feb-01		
	Apr-01		
	Jul-01		I
	Oct-01		
	Jan-00	0.1	4.6
	Apr-00	0.1	13.4
	Aug-00	0	4.6
	Nov-00	0	6.9
VW-14-35	Feb-01		3.5
	Apr-01		
	Jul-01		
	Oct-01		
	OCI-01	l	!

Well ID	Date	Methane (%) VOC (ppm)
	Feb-98	0	0
	Apr-98	0	5.9
	Jul-98	0	9
V/M/ 16 24	Oct-98	0	0
VW-16-34	Feb-99	0	16.8
	Apr-99	0.1	9.0
	Aug-99	0.2	4.6
	Oct-99	0	3.9
	Feb-98	0	10.2
	Apr-98	0	8.3
	Jul-98	0	3
	Oct-98	0	0
VW-17-35	Feb-99	0	8.8
	Apr-99	0	2.9
	Aug-99	0	3.2
	Oct-99	0	1.7
			0.1
	Feb-98	0	
	Apr-98	,	44.5
	Jul-98		43
VW-18-36	Oct-98	0.3	149
	Feb-99	0.5	153
	Apr-99	0	6.9
	Aug-99	4.4	159.1
	Oct-99	0	9.8
	Feb-98	0	; O .
	Apr-98	0	5.7
	Jul-98	0	6.1
VW-20-35	Oct-98	0	27
V VV-20-33	Feb-99	0	24.3
	Apr-99	0	3.4
	Aug-99	0	1.6
	Oct-99	0	0.7
	Feb-98	0	0.5
	Apr-98	• • • • • •	0
	Jul-98	+	10.2
	Oct-98		NM
VW-21-36	Feb-99		35
	Apr-99	0	3.2
	Aug-99	. 0	2.4
	Oct-99	0	0.6
	Feb-98		+
		+	0
	Apr-98		4.7
	Jul-98	0	41.6
VW-22-35	Oct-98	0	NM
	Feb-99	0	48
	Apr-99	0	3.7
	Aug-99	0	1.8
	Oct-99	0	0.7

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	6.9
	Apr-00	0	20.5
	Aug-00	0	1.4
	Nov-00	0	2.3
VW-16-34	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	5.2
	Apr-00	0	17.5
	Aug-00	0	2.1
	Nov-00	0	1.4
VW-17-35	Feb-01	- · · · <u>-</u> · · ·	
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	7.8
	Apr-00	0.8	136.9
	Aug-00	0.7	89.9
	Nov-00	0.7	
VW-18-36	Feb-01	u u	15.2
	Apr-01		
	Jul-01		
		• • • • • • • • • • • • • • • • • • • •	
	Oct-01		
	Jan-00	0	3.2
	Apr-00		2.3
	Aug-00	0	1.7
VW-20-35	Nov-00	0	0.8
	Feb-01		
	Apr-01		
l	Jul-01		
	Oct-01		
	Jan-00	0.1	8.2
	Apr-00	0	2.0
	Aug-00	0	1.2
VW-21-36	Nov-00	00	1.7
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.7
	Apr-00	0	2.7
	Aug-00	0	2.5
VW-22-35	Nov-00	0	1.8
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

Well ID	Date	Methane (%) VOC (ppm)
	Feb-98	0.2	2.6
	Apr-98	0	6.0
	Jul-98	0.1	36.2
V/M 00 06	Oct-98	0	14
VW-23-36	Feb-99	0	23.2
	Apr-99	0	4.8
	Aug-99	0	6.0
	Oct-99		2.3
	Feb-98		2.4
	Apr-98		5.6
	Jul-98	· · · · · · · · · · · · · · · · · · ·	29.2
	Oct-98	+	0
VW-24-35	Feb-99		15.9
	Apr-99		5.4
	Aug-99	*	4.8
	Oct-99	±	1
		4	1
	Feb-98		0
	Apr-98		11.4
	Jul-98		57
VW-25-35	Oct-98		128
	Feb-99		19.7
	Apr-99		17.8
	Aug-99		27.2
	Oct-99		6.2
	Feb-98	0.1	10.2
	Apr-98	0	4.1
	Jul-98	0.1	25
VW-26-35	Oct-98	0	43
V VV-20-33	Feb-99	0	27.0
	Apr-99	0	10.4
	Aug-99	0	2.4
	Oct-99	•	2.2
	Feb-98	·	NM
	Apr-98	+	4.9
	Jul-98	+	23.2
	Oct-98	 	NM
VW-27-09	Feb-99		19.5
	Apr-99	+	9.8
	Aug-99	·	1.6
	Oct-99		2.6
	Feb-98		13.2
	Apr-98	 	6.4
	Jul-98	-+	22.2
	Oct-98	+	
VW-27-19			NM 20.6
	Feb-99		30.6
	Apr-99		9.5
	Aug-99		1.2
***	Oct-99	0	1.9

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	5.1
	Apr-00	0	2.7
	Aug-00		1.6
1044 00 00	Nov-00	•	1.7
VW-23-36	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	3.7
	Apr-00	0	2.1
	Aug-00	0	1.5
	Nov-00	0	1.4
VW-24-35	Feb-01		
	Apr-01	 	;···
	Jul-01	r	
	Oct-01		
	Jan-00	10.4	6.9
	Apr-00	5.6	39.6
	Aug-00	8.1	31.8
	Nov-00	9.6	31.6
VW-25-35	Feb-01	3.0	
	Apr-01		
	Jul-01	-	
	Oct-01		
	Jan-00		3.2
	Apr-00	0	7.3
	Aug-00	,	to a contract the second
			1.6 14.5
VW-26-35	Nov-00 Feb-01		14.5
	Apr-01 Jul-01	: 	
ata ta	Oct-01		
	Jan-00	0	1.3
	Apr-00	0	5.4
	Aug-00	0	1.2
VW-27-09	Nov-00	0	0.7
	Feb-01		ļ
	Apr-01		ļ
	Jul-01		ļI
	Oct-01	<u> </u>	
	Jan-00	. 0	1.0
	Apr-00	0	4.5
	Aug-00	0	1.4
VW-27-19	Nov-00	0	1.0
	Feb-01		ļ
	Apr-01		
	Jul-01		
	Oct-01	!	l

Well ID	Date	Methane (%) VOC (ppm)
	Feb-98	0	12.0
	Apr-98	0	2.4
	Jul-98	0	33.7
VW-27-33	Oct-98	0	NM
V VV-2/-33	Feb-99	0	26.2
	Apr-99	0	8.7
	Aug-99	0	1.3
	Oct-99	0	2.4
	Feb-98	NM	NM
	Apr-98	NM	NM
	Jul-98		5.7
	Oct-98	0	1
VW-28-10	Feb-99	0	4.1
	Apr-99	0	4.4
	Aug-99	0	1.6
	Oct-99	0	29.4
	Feb-98	NM	NM
	Apr-98	NM	NM
	Jul-98	0	3.9
	Oct-98	0	0.5
VW-28-25	Feb-99	. 0	4.4
		. 0	3.2
	Apr-99	. 0	1.8
	Aug-99 Oct-99		26.2
	Feb-98	0	10.7
	Apr-98	. 0	10.3
	Jul-98	•	24.3
VW-29-10	Oct-98	0	0
	Feb-99	. 0	6.2
	Apr-99	. 0	1.1
	Aug-99	. 0	2.4
	Oct-99	. 0	19.3
	Feb-98	0	7.9
	Apr-98	0	6.7
	Jul-98	<u>. 0</u>	11.8
VW-29-23	Oct-98	0	0
	Feb-99	0	4.6
	Apr-99	0	9.0
	Aug-99	0	2.5
	Oct-99	0	13.6
	Feb-98	0	7.0
	Apr-98	0	4.5
	Jul-98	0	0
VW-29-35	Oct-98	0	3
V 11-23-33	Feb-99	0	2.5
	Apr-99	0	10.6
	Aug-99	NM	NM
	Oct-99	0	15.5

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	0.7
	Apr-00	0	3.9
	Aug-00	0	0.9
	Nov-00	0	1.3
VW-27-33	Feb-01		-
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.3
	Apr-00	0	1.4
	Aug-00	0	56.7
	Nov-00	0	1.1
VW-28-10	Feb-01		- · · · · · · · · · · · · · · · · · · ·
	Apr-01		–
	Jul-01		
	Oct-01		
			0.4
	Jan-00	0	2.1
	Apr-00	0	1.0
	Aug-00	0	30.3
VW-28-25	Nov-00	_ 0	1.1
	Feb-01	·	
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.7
	Apr-00	0	1.2
	Aug-00	0	7.2
VW-29-10	Nov-00	0	1.1
711 20 10	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.4
	Apr-00	0	0.9
	Aug-00	0	6.3
VW-29-23	Nov-00	0	1.1
717-23-23	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.3
	Apr-00	0	0.7
	Aug-00	0	4.9
VW-29-35	Nov-00	0	0.9
V VV-29-35	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

Well ID	Date	Methane	(%) VOC (ppm)
	Feb-98	0	2.9
	Apr-98	0	7.8
	Jul-98	·	17
	Oct-98		7
VW-30-07	Feb-99	+	2.0
	Apr-99		3.8
	Aug-99		3.3
	Oct-99	· · · · · · · · · · · · · · · · · · ·	1.7
	Feb-98	4	1.0
	Apr-98		1.4
	Jul-98	rijer om der der de sen er de	21
	Oct-98		5
VW-30-23	Feb-99		2.0
	Apr-99		3.3
	1		
	Aug-99		3.4 1.5
	Oct-99	4	
	Feb-98		1.4
	Apr-98		1.7
	Jul-98		12
VW-30-35	Oct-98	At a contract of the contract	4
	Feb-99		3.0
	Apr-99	•	3.4
	Aug-99	. 0	2.8
	Oct-99	0	1.5
	Feb-98	0	4.8
	Apr-98	0	4.4
	Jul-98	0	31
VW-31-10	Oct-98	0	36
V VV - 3 1 - 10	Feb-99	0	25.9
	Apr-99	0	5.5
	Aug-99	0	4.0
	Oct-99		8.1
	Feb-98	0	4.1
	Apr-98	***	0
	Jul-98	0	33
	Oct-98	The second second	20
VW-31-30	Feb-99		25.7
	Apr-99	T	5.0
	Aug-99		3.2
	Oct-99	+	4.6
	Feb-98	· 	0.7
	Apr-98		7.4
	Jul-98	*	5.6
	Oct-98		· + · · · · · · · · · · · · · · · ·
VW-32-08			13
	Feb-99	*****	26.0
	Apr-99	†	23.1
	Aug-99	4	4.2
	Oct-99	<u> </u>	<u> </u>

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	2.3
	Apr-00	0	9.6
	Aug-00	0	2.2
	Nov-00		1.2
VW-30-07	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	1.4
	Apr-00	manufacture of the second contract of the sec	4.9
	Aug-00	† · · · · · · · · · · · · · · · · · · ·	2.6
	Nov-00	• • • • • • • • • • • • • • • • • • • •	1.5
VW-30-23	Feb-01	<u></u>	1.5
		· 	! <u>-</u>
	Apr-01		:
	Jul-01		<u>.</u>
	Oct-01		
	Jan-00	0	1.2
	Apr-00	0	2.4
	Aug-00	0	2.9
VW-30-35	Nov-00	0	1.2
	Feb-01		
	Apr-01	2	
	Jul-01		
	Oct-01		
	Jan-00	0	0.8
	Apr-00	0	3.5
	Aug-00	0	3.4
VW-31-10	Nov-00	0	1.9
V VV-31-10	Feb-01	:	
	Apr-01		
	Jul-01	• :	!
	Oct-01		
	Jan-00	0	0.5
	Apr-00	1	2.6
	Aug-00		3.0
	Nov-00		
VW-31-30	Feb-01		· · · · · · · · · · · · · · · · · · ·
	Apr-01		<u> </u>
	Jul-01		
	Oct-01		
	Jan-00	0	0.7
	Apr-00	0	0.7
	Aug-00	0	3.0
	Nov-00	0	1.1
VW-32-08	Feb-01		1.1
	Apr-01		<u>.</u>
	Jul-01		
	Oct-01	<u> </u>	
	OCT-01	<u> </u>	i

Well iD	Date	Methane (%)	VOC (ppm)
	Feb-98	0	1.4
	Apr-98	0	5.5
	Jul-98	0	2.6
VW-32-18	Oct-98	0	27
V VV-32-16	Feb-99	0	24.4
	Apr-99	0	20.5
	Aug-99	0	3.8
	Oct-99	0	0
	Feb-98	0	0.9
	Apr-98	0	4.7
	Jul-98	0	2.4
	Oct-98	0	37
VW-32-35	Feb-99	1	25.8
	Apr-99	· · · · · · · · · · · · · · · · · ·	17.7
	Aug-99	1	3.9
	Oct-99		0
	Feb-98	• · · · · · · · · · · · · · · · · · · ·	1.9
	Apr-98	· · · · · · · · · · · · · · · · · · ·	2.4
	Jul-98		43.2
Ì	Oct-98	* · ·	NM
VW-33-10	Feb-99	•	19.2
1	Apr-99		6.7
	1		6.3
	Aug-99		1.3
	Oct-99		
	Feb-98		2.0
	Apr-98	4	3.9
	Jul-98	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4.2
VW-33-35	Oct-98	1	NM
	Feb-99	1	26.3 5.5
	Apr-99	+ *	• Company of the comp
ļ	Aug-99	+	5.9
	Oct-99	4	1.1
	Feb-98	4	5.1
	Apr-98		6.4
	Jul-98	+	42
VW-34-10	Oct-98	+	10
	Feb-99		17.2
	Apr-99		7.8
	Aug-99		1.3
	Oct-99		1.2
	Feb-98		3.2
	Apr-98	***************************************	4.0
	Jul-98	0	12
VW-34-23	Oct-98	0	12
V VV-34-23	Feb-99		20.6
	Apr-99	+	6.6
	Aug-99		2.3
	Oct-99	0	0.7

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00		0.6
·	Apr-00	0	1.1
•	Aug-00	0	2.8
VVM 00 40	Nov-00	0	1.1
VW-32-18	Feb-01		
	Apr-01		
	Jul-01	,	
	Oct-01		
	Jan-00	0	0.5
	Apr-00	0	0.9
	Aug-00	0	2.6
	Nov-00	0	0.9
VW-32-35	Feb-01		
	Apr-01		
	Jul-01	•	
	Oct-01		
	Jan-00	0	2.7
	Apr-00	0	8.3
	Aug-00	0	0
	Nov-00	0	0.9
VW-33-10	Feb-01	•	
	Apr-01	•	
	Jul-01		
	Oct-01		
	Jan-00	0	1.6
	Apr-00	0	8.1
	Aug-00	0	1.1
	Nov-00	0	1.1
VW-33-35	Feb-01		
	Apr-01		
	Jul-01	•	
	Oct-01		
	Jan-00	0	NF
	Apr-00	0	14.5
	Aug-00	0	3.0
104/04/40	Nov-00	0	0.3
VW-34-10	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	NF
	Apr-00	0	55.4
	Aug-00	· · · · · · · · · · · · · · · · · · ·	2.8
V/MC 0.4 00	Nov-00		0.4
VW-34-23	Feb-01	:	
	Apr-01	·	
	Jul-01		
	Oct-01		

Well ID	Date	Methane (%) VOC (ppm)
	Feb-98	0	3.2
	Apr-98	0	3.0
	Jul-98	0	10
VW-34-40	Oct-98	NM	20
V VV-34-40	Feb-99	0	6.8
	Apr-99	0	2.9
	Aug-99	0	1.8
	Oct-99	0	0.7
	Feb-98	0	0
	Apr-98	0	2.3
	Jul-98		42
	Oct-98	•	12
VW-35-10	Feb-99	· · · · - · - · · · · · · · · · · · · ·	20.6
	Apr-99	•	7.7
	Aug-99	•	3.6
	Oct-99		0.9
	Feb-98	÷	0.5
	Apr-98		5.4
		and the second second second	5.4
	Jul-98	• • • • • • • • • • • • • • • • • • • •	
VW-35-38	Oct-98	• • • • • • • •	23
	Feb-99	. 0	6.5
	Apr-99	r	7.7
	Aug-99	0	3.6
	Oct-99	0	1
	Feb-98	0	0
	Apr-98	0	18.6
	Jul-98	47	00
VW-36-10	Oct-98	0	0
VVV-30-10	Feb-99	0	14.6
	Apr-99	0	4.2
	Aug-99	0	2.4
	Oct-99	0	0
	Feb-98	0	0
	Apr-98	0	8.1
	Jul-98	40	0
1041.00.00	Oct-98		0
VW-36-30	Feb-99		3.0
	Apr-99		10.8
	Aug-99	ļ	2.6
	Oct-99	•	0
	Feb-98	0	9.2
	Apr-98	† · · · · - · · · · · · · · · · · · · ·	5.2
	Jul-98		0
	Oct-98	·	33
VW-37-10			
	Feb-99		8.6
	Apr-99		7.6
	Aug-99		3.2
	Oct-99	0	0.5

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	NF
	Apr-00	2.7	46.1
· ·	Aug-00	0	2.7
VW-34-40	Nov-00	0	0.4
V VV-34-40	Feb-01		
	Apr-01		
	Jul-01		-
	Oct-01		
	Jan-00	0.1	0
	Apr-00	0	1.2
	Aug-00	0	0.2
V0M 05 40	Nov-00	0	0.8
VW-35-10	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01	• • • • • • • • • • • • • • • • • • •	
	Jan-00	0.1	0
	Apr-00	0	2.2
	Aug-00	0	1.4
1044 OF 00	Nov-00	0	1.2
VW-35-38	Feb-01		
	Apr-01	:	
	Jul-01		
	Oct-01		
	Jan-00	0	3.5
	Apr-00		0.9
	Aug-00		1.0
	Nov-00	0	1.2
VW-36-10	Feb-01	 	'
	Apr-01		.
	Jul-01		
	Oct-01		
	Jan-00	0	4.1
	Apr-00	0	0.8
	Aug-00	0	0.9
1041 65 65	Nov-00	0	1.7
VW-36-30	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	0
	Apr-00	0	2.1
	Aug-00	0	0.9
1/14/ OF 10	Nov-00	0	0.8
VW-37-10	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		i

Well ID	Date	Methane (%) VOC (ppm)
	Feb-98	0	6.4
	Apr-98	<i>,</i> 0	2.6
	Jul-98		3
VW-37-30	Oct-98	. 0	17
VIV-37-00	Feb-99	0	0
	Apr-99	0	6.4
	Aug-99	0	3.2
	Oct-99	0	0.5
	Feb-98	0	10
	Apr-98	0	6.2
	Jul-98	43	0
1044 00 40	Oct-98	0	13
VW-38-10	Feb-99	0	3.6
	Apr-99	0	5.5
	Aug-99	•	1.4
	Oct-99	•	1
	Feb-98		30
	Apr-98	•	9.5
	Jul-98		62
	Oct-98		14
VW-38-34	Feb-99		12.5
	Apr-99		5.5
	Aug-99		7.4
	Oct-99		9.2
		k a same a	4
	Feb-98	a company	18.3
	Apr-98		4.3
	Jul-98		40
VW-39-07	Oct-98	• •	7
	Feb-99	ment of the second	43.5
	Apr-99	· control of the cont	7.8
	Aug-99		3.0
-	Oct-99		3.9
	Feb-98		12.3
	Apr-98	4	4.2
	Jul-98		42
VW-39-30	Oct-98	T	8
	Feb-99	t	6.5
	Apr-99		8.2
	Aug-99	0	3.3
	Oct-99	0	2.9
	Feb-98	0.4	29.6
	Apr-98	0.5	1.5
	Jul-98	0.6	2.0
V/M/ 40 10	Oct-98	0.2	5.8
VW-40-10	Feb-99		22.3
	Apr-99	0.2	6.5
	Aug-99	†·· · · · · · · · · · · · · · · · · · ·	1.9
	Oct-99	•	1.3

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	0
	Apr-00	0	1.3
	Aug-00	0	1.5
1/1M/ 07 00	Nov-00	0	0.8
VW-37-30	Feb-01		
	Apr-01		T
	Jul-01	· · · · · · · · · · · · · · · · · ·	
	Oct-01		
	Jan-00	0	6.3
	Apr-00	0	0.4
	Aug-00	0	0.9
	Nov-00	0	1.1
VW-38-10	Feb-01		· · · · · · · · · · · · · · · · · · ·
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	8.7
	Apr-00	0	4.2
	Aug-00	0	10.8
	Nov-00		
VW-38-34	Feb-01	. 0	1.8
•	Apr-01	• •	
	Jul-01		<u></u>
	Oct-01		
	Jan-00	0	4.3
:	Apr-00	0	4.9
	Aug-00	0	2.0
VW-39-07	Nov-00	0	1.9
	Feb-01		
	Apr-01		.i
	Jul-01	n - n	
	Oct-01		ļ
	Jan-00	0	14.1
	Apr-00	0	6.7
	Aug-00		2.4
VW-39-30	Nov-00	0	1.4
50 00	Feb-01		<u> </u>
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	NF
	Apr-00	0	1.8
	Aug-00	0.5	0.5
VW-40-10	Nov-00	0	3.5
* *** -* U-1U	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

Well ID		Methane (%)	VOC (ppm)
	Feb-98	0	21.7
	Apr-98	0	1.8
	Jul-98	0	0
V/M 40 05	Oct-98	0	0
VW-40-25	Feb-99	0	27.3
	Apr-99	0	7.7
	Aug-99	0	2.0
	Oct-99	19.2	2.3
	Feb-98	0	5.7
	Apr-98		4.5
	Jul-98	+	42
	Oct-98	0	19
VW-41-08	Feb-99	0	10.0
	Apr-99	. 0	6.1
	Aug-99	O	2.3
	Oct-99	0	0.7
	Feb-98	0	3.2
	Apr-98	0	
	Jul-98	i	2.6
			31
VW-41-20	Oct-98		32
	Feb-99	0	15.4
	Apr-99	0	6.5
	Aug-99	0.1	1.8
	Oct-99	0	0.8
	Feb-98	NM	NM
	Apr-98	NM	NM
	Jul-98	0	2.8
VW-42-10	Oct-98	0	24
	Feb-99	0	45.6
	Apr-99	0	2.8
	Aug-99	0	2.4
	Oct-99	0	1.2
	Feb-98	NM	NM
	Apr-98	NM	NM
	Jul-98	0	2.5
VW-42-30	Oct-98	0	29
V VV-42-30	Feb-99	0	27.6
	Apr-99	0	0
	Aug-99	0	2.4
	Oct-99	0	0.8
	Feb-98	NM	NM
	Apr-98	0	7.4
	Jul-98	0	4
VW-43-09	Oct-98	0	NM
	Feb-99	0	39.5
	Apr-99	0	8.2
	Aug-99	0	2.1
	Oct-99	0	1.5

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	NF
	Apr-00	0	3.9
	Aug-00	0	0.5
1014 40 05	Nov-00	0	3.0
VW-40-25	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	NF
	Apr-00	0	2.9
	Aug-00	0	1.8
	Nov-00	0	0.8
VW-41-08	Feb-01		
	Apr-01		
	Jul-01	· - · · · · · · · · · · · · · · · · · ·	
	Oct-01	, . .	
,	Jan-00	0	NF
	Apr-00	0	2.7
	Aug-00	0	1.4
	Nov-00	0	0.7
VW-41-20	Feb-01	· · · · · · · · · · · · · · · · · · ·	· (
	Apr-01		•
	Jul-01		i
	Oct-01	,	
- · · · ·	Jan-00	0	1.4
	Apr-00	0	1.8
	Aug-00	0	13.5
	Nov-00	0	3.0
VW-42-10	Feb-01	🗀	
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	1.8
	Apr-00	. 0	1.4
	Aug-00	0	12.1
	Nov-00	0	2.5
VW-42-30	Feb-01		£.U
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	1.2
	Apr-00	0	0.7
	Aug-00	0	0.5
	Nov-00	0	8.2
VW-43-09	Feb-01		<u> </u>
	Apr-01		
	Jul-01		
	Oct-01		

Well ID	Date M	ethane (%)	VOC (ppm)
	Feb-98	0	5.4
	Apr-98	0.9	3.3
	Jul-98	0.9	4
V/W 40 40	Oct-98	0.6	NM
VW-43-19	Feb-99	1.4	37
	Apr-99	1.9	5.4
	Aug-99	0.6	2.3
	Oct-99	2.1	1.6
	Feb-98	1.9	2.0
	Apr-98	1.6	0.7
	Jul-98	1.6	2
	Oct-98	0.7	NM
VW-43-32	Feb-99	0.7	38.2
	Apr-99	1.3	6.0
	Aug-99	0.5	2.6
	Oct-99	1.3	1.5
÷			
	Feb-98	0	0
	Apr-98	0.	10.0
	Jul-98	0	41
VW-44-07	Oct-98	0	20
	Feb-99	0	16.2
	Apr-99	0	7.1
	Aug-99	0.4	2.4
	Oct-99	0.3	0.9
	Feb-98	0	0
	Apr-98	0_	9.2
	Jul-98	0	40
VW-44-16	Oct-98	.0	18
V VV-44-10	Feb-99	NM	NM
	Apr-99	0	5.5
	Aug-99	NM	NM
	Oct-99	NM	NM
	Feb-98	0.4	0
	Apr-98	0.5	4.0
	Jul-98	0.4	40
	Oct-98	0	13
VW-44-30	Feb-99	0	0.6
	Apr-99	0	5.9
	Aug-99	0	3.5
	Oct-99	0	0.9
	Feb-98	NM	NM NM
	Apr-98	NM	NM
	Jul-98	85.2	35
	Oct-98	48.8	NM
VW-45-13	Feb-99	74	
			84.2
	Apr-99	95.6 94.5	1.3
	Aug-99 Oct-99	94.5	21.5
	001-99	J4	16.8

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	2.3	1.5
•	Apr-00	1.7	2.3
	Aug-00	0.6	1.9
1044 40 40	Nov-00	0.5	6.9
VW-43-19	Feb-01		
	Apr-01	• · · · · · · · · · · · · · · · · · ·	
	Jul-01		
	Oct-01	· · · · · · · · · · · · · · · · · · ·	
	Jan-00	1.5	2.1
	Apr-00	1.1	2.5
	Aug-00		2.6
\/\\\ 40.00	Nov-00	0.4	6.4
VW-43-32	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.3
	Apr-00	0	1.3
	Aug-00	0.8	1.0
	Nov-00	0	0.7
VW-44-07	Feb-01	· · · · ·- ·- ·	
	Apr-01		
	Jul-01		
	Oct-01		•
	Jan-00	0	1.6
	Apr-00	•	1.5
	Aug-00		2.4
	Nov-00	• • • • • • • • • • • • • • • • • • • •	NM
VW-44-16	Feb-01	•	
	Apr-01	1	
	Jul-01	<u>.</u>	
	Oct-01	:	
	Jan-00	0	2.0
	Apr-00	0	1.3
	Aug-00	12	95.5
VW-44-30	Nov-00	0	0.6
V VV-44-30	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
Description of the second of t	Jan-00	20.8	99.5
	Apr-00	NM	NM
	Aug-00	58.4	108
VW-45-13	Nov-00	30.9	117
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

Well ID	Date M	lethane (%	VOC (ppm)
	Feb-98	10.4	19.7
	Apr-98	15.6	80.8
	Jul-98	16.5	61
VW-45-22	Oct-98	5.5	NM
V VV-45-22	Feb-99	22.7	96
	Apr-99	55.4	8.5
	Aug-99	45.6	56.1
	Oct-99	74.2	19.5
	Feb-98	4.3	5.7
	Apr-98	1.4	29.3
	Jul-98	3.5	66
1044 45 00	Oct-98	0.4	NM
VW-45-30	Feb-99	1.3	94
	Apr-99	2.5	32.6
	Aug-99	1.6	62.2
	Oct-99	2.7	54
	Feb-98	NM	NM
	Apr-98	NM	NM
	Jul-98	0.6	19
	Oct-98	4.5	10
VW-46-07	Feb-99	1.4	11.6
	Apr-99	NM	NM
	Aug-99	0.7	2.4
	Oct-99	1.5	1.2
-			15.1
	Feb-98	0	
	Apr-98	0	1.2
	Jul-98	0	17
VW-46-15	Oct-98	0	25
	Feb-99	0 0	17.3
	Apr-99		7.5
	Aug-99	0	2.2
	Oct-99	0	0.5
	Feb-98	0	11.4
	Apr-98	0	1.4
	Jul-98	0	4
VW-46-27	Oct-98	0	30
	Feb-99	0	16.3
	Apr-99	0	7.4
	Aug-99	0	2.6
	Oct-99	0	0.5
	Feb-98	NM	NM
	Apr-98	0	17.3
	Jul-98	0	16
VW-47-08	Oct-98	0	NM
¥ ##- - #7-00	Feb-99	0	48
	Apr-99	0	3.0
	Aug-99	0	2.0
	Oct-99	0	1.7

Wall ID	Date	Mothana (9/)	VOC (nnm)
Well ID	Jan-00	Methane (%)	
		26.6	88.8
	Apr-00		32.4
	Aug-00	37.5	111
VW-45-22	Nov-00	21.5	102
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00		52.7
	Apr-00		32.9
	Aug-00		47.6
VW-45-30	Nov-00	0.7	29.6
	Feb-01		
	Apr-01		
	Jul-01	ļ <u>-</u>	-
	Oct-01	· · · · · · · · · · · · · · · · · · ·	
	Jan-00	2.8	NF
	Apr-00	2.0	5.7
	Aug-00	1.7	3.3
VW-46-07	Nov-00	0.9	2.9
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	NF
	Apr-00	9.6	3.2
	Aug-00	0	1.3
VW-46-15	Nov-00	0	2.5
111 /0 /0	Feb-01	! , ,	
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	NF
	Apr-00	4.4	3.6
	Aug-00	0	0.3
VW-46-27	Nov-00	0	2.1
111-40-27	Feb-01		
	Apr-01		<u>.</u>
	Jul-01		
	Oct-01		
	Jan-00	0	2.9
	Apr-00	0	2.3
	Aug-00	0	0.7
VW-47-08	Nov-00	0	1.2
7 11 47 00	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

Well ID	Date M	ethane (%)	VOC (ppm)
	Feb-98	0	0.1
	Apr-98	0.1	12.5
	Jul-98	0.2	11
	Oct-98	0	NM
VW-47-18	Feb-99	0	48
	Apr-99	0	3.0
	Aug-99	0	1.8
	Oct-99	0	0.9
	Feb-98	0.1	О
	Apr-98	0.2	6.9
	Jul-98	0.1	18.2
	Oct-98	0	NM
VW-47-30	Feb-99	0	45.6
	Apr-99	0	2.9
	Aug-99	0	2.2
	Oct-99	Ö	1
	Feb-98	73.1	'
	•	and the second second	NM
	Apr-98	NM	49.1
	Jul-98	35	
VW-48-08	Oct-98	100	45
	Feb-99	29.9	40.7
	Apr-99	36.6	3.2
	Aug-99	34	17.2
	Oct-99	52.9	19.2
	Feb-98	63.1	0
	Apr-98	100	3.0
	Jul-98	55	72.0
VW-48-17	Oct-98	100	4.0
	Feb-99	73	49.8
	Apr-99	99	280
	Aug-99	100	33.4
	Oct-99	81	2.2
	Feb-98	4.5	48.5
	Apr-98	5.8	36
	Jul-98	2.0	64.0
VW-48-35	Oct-98	1.8	87
V VV-40-00	Feb-99	1.4	23.6
	Apr-99	2.3	12.7
	Aug-99	2.2	50.4
	Oct-99	2.5	44
	Feb-98	0	0
	Apr-98	0	18.5
	Jul-98	0	24.3
V/W/40 40	Oct-98	0	53
VW49-10	Feb-99	0	7.7
	Apr-99	0	5.7
	Aug-99	0	4.0
	Oct-99	0	0.8

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	2.1
	Apr-00	0	1.8
	Aug-00	0	0.7
VW-47-18	Nov-00	0	1.2
V VV-47-16	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.2
· · · · · · · · · · · · · · · · · · ·	Apr-00	0	1.8
	Aug-00	0	0.9
VW-47-30	Nov-00	0	1.2
V VV-47-30	Feb-01	1	
	Apr-01		
	Jul-01		
	Oct-01		: •
	Jan-00	62.3	2.9
	Apr-00	46.9	39.3
	Aug-00	31.1	26.5
VW-48-08	Nov-00	11.9	22.3
V VV-46-06	Feb-01		
	Apr-01		
	Jul-01		
_	Oct-01		1
	Jan-00	NM	NM
	Apr-00	83.0	14.1
	Aug-00	NM	NM
VW-48-17	Nov-00	NM	NM
70 17	Feb-01	 	
	Apr-01		
	Jul-01		
	Oct-01	*****	<u> </u>
	Jan-00	2.0	31.2
	Apr-00	2.9	47.3
	Aug-00	1.1	25.3
VW-48-35	Nov-00	0.6	15.5
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.6
	Apr-00	0	0.8
	Aug-00		3.5
VW49-10	Nov-00	0	1.1
	Feb-01		
	Apr-01		
	Jul-01		ļ
	Oct-01		

Well ID	Date	Methane (%	VOC (ppm)
	Feb-98	0	2.3
	Apr-98	0	6.3
	Jul-98	0	36.9
VW49-18	Oct-98		37
V V 43 13	Feb-99	0	5.4
	Apr-99	0	3.2
	Aug-99		3.8
	Oct-99	0	0.8
	Feb-98	0	1.1
	Apr-98	0	4.3
	Jul-98	0	45.6
VW49-30	Oct-98	0	NM
V VV 45-30	Feb-99	0	10.6
	Apr-99	0	3.5
	Aug-99	0	3.5
	Oct-99	0	0.8
	Feb-98	0	6.5
	Apr-98	0	6.7
	Jul-98	NM	NM
VW-50-08	Oct-98	0	10
V VV-50-06	Feb-99	0	16.8
	Apr-99	0	10.1
	Aug-99	0	3.7
	Oct-99	0	1.4
	Feb-98	0	3.5
	Apr-98	0	4.2
	Jul-98	NM	NM
V/M 50 40	Oct-98	0	7
VW-50-18	Feb-99	0	29.5
	Apr-99	0	11.2
	Aug-99	0	2.9
	Oct-99	4	1.1
	Feb-98	0	3.5
	Apr-98	\$1.1.1	3.1
	Jul-98		NM
V/M 50.05	Oct-98	1	8
VW-50-35	Feb-99	Approximately the second of the second	29.7
	Apr-99		11.4
	Aug-99	+	3.7
	Oct-99		1.5
	Feb-98	_	NM
	Apr-98	· · · · · · · · · · · · · · · · · · ·	NM
	Jul-98	 	NM
VW-51-08	Oct-98	·	NM
	Feb-99	+	17.8
	Apr-99		10.2
	Aug-99	+	2.1
	Oct-99		21.2

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	2.4
	Apr-00	0	1.2
	Aug-00	0	3.6
101140 40	Nov-00	0	1.1
VW49-18	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	1.6
	Apr-00	0	1.3
	Aug-00	0	3.5
	Nov-00	0	0.2
VW49-30	Feb-01		
	Apr-01		-
	Jul-01		
	Oct-01		
	Jan-00	0	0.7
	Apr-00	0	4.4
	Aug-00	0	0
	Nov-00	·	2.6
VW-50-08	Feb-01	T	
	Apr-01		
	Jul-01		-
	Oct-01	• • • • • • • • • • • • • • • • • • • •	
• • •	Jan-00	0	0.5
	Apr-00	0	0.6
	Aug-00	0	0
	Nov-00	0	2.5
VW-50-18	Feb-01		
	Apr-01	+·	
	Jul-01		•
	Oct-01		
	Jan-00	0	0.4
	Apr-00	0	2.5
	Aug-00	0	0
\/\\\ = 0 0=	Nov-00	0	2.3
VW-50-35	Feb-01		
	Apr-01		
	Jul-01	· · · · · · · · · · · · · · · · · · ·	
	Oct-01		
	Jan-00	0	1.3
	Apr-00	0	1.8
	Aug-00	0.2	5.4
V/M/ E4 00	Nov-00	0	1.6
VW-51-08	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

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Well ID	Date M	ethane (%)	VOC (ppm)
	Feb-98	100	12.3
	Apr-98	142	3.1
	Jul-98	99.9	59
VW C1 10	Oct-98	1.5	11
VW-51-18	Feb-99	NM	NM
	Apr-99	NM	NM
	Aug-99	NM	NM
	Oct-99	94	2.1
	Feb-98	6.2	12.3
	Apr-98	3.7	25
	Jul-98	0	43
	Oct-98	1.3	19
VW-51-30	Feb-99	1.1	24.8
	Apr-99	2.3	10.1
	Aug-99	0.8	7.5
	Oct-99	2.7	22.9
	4		r
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	0	28.9
VW-52-10	Oct-98	0	27
'''	Feb-99	0	36.4
	Apr-99	0	NM
	Aug-99	0.1	5.1
	Oct-99	0	6
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	0	5.1
VW 50 40	Oct-98	0	24
VW-52-19	Feb-99	0	6.1
	Apr-99	0	NM
	Aug-99	0	4.8
	Oct-99	0	2.1
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	0	3.5
	Oct-98	0	22
VW-52-30	Feb-99	0	7.9
			7.9 NM
	Apr-99	0	
	Aug-99	0	2.8
	Oct-99	0	1.7
	Feb-98	NI.	NI Ni
	Apr-98	NI NI	NI .
,	Jul-98	0.1	14.3
VW-53-10	Oct-98	0.5	62
	Feb-99	0.4	14.8
	Apr-99	0.6	17.6
	Aug-99	1.2	12.8
	Oct-99	0	9.6

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	99	33.1
	Apr-00	95	66.4
	Aug-00	NM	NM
VVM 54 40	Nov-00	NM	NM
VW-51-18	Feb-01		
	Apr-01		
	Jul-01	·· - · · · ·	
	Oct-01		
	Jan-00	2.9	8.5
	Apr-00	2.9	23.9
	Aug-00	1.2	14.6
VW-51-30	Nov-00	1.0	7.2
VW-51-30	Feb-01		,
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	6.3
	Apr-00	0	13.1
	Aug-00	0	0
= 0 . 0	Nov-00	0	4.6
VW-52-10	Feb-01		
	Apr-01		
	Jul-01	•	
	Oct-01		
	Jan-00	0	3.1
	Apr-00	0	6.1
	Aug-00	0	0
1011 50 40	Nov-00	0	3.0
VW-52-19	Feb-01	· · · · · · · · · · · · · · · · · · ·	·
	Apr-01	:	
	Jul-01		
	Oct-01	·	
	Jan-00	0	2.6
	Apr-00	0	4.3
	Aug-00	0	0
VW-52-30	Nov-00		2.9
VW-52-30	Feb-01		
	Apr-01	American III	
	Jul-01		
	Oct-01		
	Jan-00	0.5	11.8
	Apr-00	1.2	47.6
	Aug-00	1.3	26.7
VW-53-10	Nov-00	0.5	13.1
V VV-33-10	Feb-01	<u> </u>	
	Apr-01		
	Jul-01		
	Oct-01		

Well ID	Date	Methane (%)	VOC (ppm)
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	0.1	5.6
= 0.00	Oct-98	0	26
VW-53-20	Feb-99	0	37.4
	Apr-99	0	6.2
	Aug-99	0	11.4
	Oct-99	0	2.1
	Feb-98	NI	NI
	Apr-98	 	NI
	Jul-98		4.4
	Oct-98		29
VW-53-30	Feb-99	*	36.4
	Apr-99		9.1
	Aug-99	ļ	4.0
	Oct-99		2.5
	Feb-98		NI
			Ni
	Apr-98 Jul-98	÷	NI
	fr		29
VW-54-12	Oct-98	• • • •	
	Feb-99		30
	Apr-99		4.9
	Aug-99	. 0	1.6
	Oct-99		6.4
	Feb-98	. NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
VW-54-20	Oct-98	0.6	28
	Feb-99	in a second	31.9
	Apr-99	0.5	2.6
	Aug-99	0	1.6
	Oct-99		3.8
	Feb-98	NI	NI
	Apr-98	NI	Ni
	Jul-98	• · · · · · · · · · · · · · · · · · · ·	NI
VW-54-30	Oct-98	0.2	14
•••	Feb-99	0.3	30.0
	Apr-99	0.5	2.6
	Aug-99	0.2	1.2
	Oct-99	0.2	4.1
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
VW-55-05	Oct-98	11.5	0.5
	Feb-99	NM	NM
	Apr-99	NM	NM
	Aug-99	8.9	1.8
	Oct-99	8.4	8

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	4.3
	Apr-00	2.4	18.9
	Aug-00	0	6.0
VW-53-20	Nov-00	0	5.2
V W-53-20	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	3.3
	Apr-00	14.2	12.4
	Aug-00	0	0
VW-53-30	Nov-00	0	2.6
V W-53-30	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.1
	Apr-00	0.7	7.7
	Aug-00	0	3.4
V/M 54 40	Nov-00	0	6.0
VW-54-12	Feb-01		* * * * *
ı	Apr-01		[
	Jul-01		1
	Oct-01	······································	·
	Jan-00	0.2	1.2
	Apr-00	0.3	3.4
	Aug-00	0	3.2
VW-54-20	Nov-00	0	5.6
V VV-54-20	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0.3	1.1
	Apr-00	0.3	4.0
	Aug-00	0	3.0
VW-54-30	Nov-00	0	4.9
V VV - 54 - 56	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	4.8	6.4
	Apr-00	NM	NM
	Aug-00	0.8	2.4
VW-55-05	Nov-00	NM	NM
55 55	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

Well ID	Date	Methane	(%) VOC (ppm)
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
V/M 55 40	Oct-98	0.7	0
VW-55-18	Feb-99	0.6	14.8
	Apr-99	0.6	11.4
	Aug-99	0.5	6.3
	Oct-99	0.8	12.4
	Feb-98	NI	NI
	Apr-98	Ni	NI
	Jul-98	NI	NI
\/\\ == 00	Oct-98	0.6	0.7
VW-55-29	Feb-99	0.5	14.3
	Apr-99	0.5	10.9
	Aug-99		4.5
	Oct-99	0.7	7.8
	Feb-98	NI	NI
	Apr-98		NI
	Jul-98	NI	NI
	Oct-98		33
VW-56-08	Feb-99	. 0	23.7
	Apr-99		5.9
	Aug-99	, <u> </u>	6.5
	Oct-99	. 0	1.2
	Feb-98		NI
	Apr-98	N	. NI
	Jul-98		NI
	Oct-98		37
VW-56-17	Feb-99	0	32.2
	Apr-99	•	NM
	Aug-99	0	5.3
	Oct-99	0	1
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
	Oct-98	0	45
VW-56-28	Feb-99	0	30.5
	Apr-99	0	5.3
	Aug-99	0	5.7
	Oct-99	0	0.9
	Feb-98	NI	NI
	Apr-98	NI	NI NI
	Jul-98		NI
	Oct-98	0	11
VW-57-07	Feb-99	0	14.5
	Apr-99	0	7.8
	Aug-99		2.8
	Oct-99		1.3

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0.9	4.9
	Apr-00	0.7	6.6
	Aug-00	0.8	6.8
==	Nov-00	0.2	6.1
VW-55-18	Feb-01		
	Apr-01		
	Jul-01		
:	Oct-01		
	Jan-00	0.7	5.7
	Apr-00	0.6	7.2
	Aug-00		2.3
	Nov-00	0.1	3.9
VW-55-29	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.6
	Apr-00	0	1.0
	Aug-00	0	0.9
	Nov-00	Ô	2.0
VW-56-08	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.8
	Apr-00	0	1.0
	Aug-00	0	0.8
	Nov-00	0	1.8
VW-56-17	Feb-01	† v .	1.0
	Apr-01		· · · · · · -
	Jul-01		
	Oct-01		
	Jan-00		26
	Apr-00	0	2.6 0.8
	*	0	
	Aug-00 Nov-00	0	0.7
VW-56-28		U	1.6
	Feb-01 Apr-01		
	Jul-01		
	Oct-01	ļ	
	Jan-00		<u>-</u>
		0	0.7
	Apr-00		1.4
	Aug-00 Nov-00	0	0.6
VW-57-07	Feb-01	U	0.0
	Apr-01		
	Jul-01		
	Oct-01	: 	

Well ID	Date	Methane (%	VOC (ppm)
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
	Oct-98	0	20
VW-57-18	Feb-99	0	23.7
	Apr-99	0	3.3
	Aug-99	0	2.7
	Oct-99	0	2.1
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
	Oct-98	0.1	50
VW-57-26	Feb-99	0	21.2
	Apr-99	i	7.5
	Aug-99		2.7
	Oct-99	. 0	2.1
	Feb-98	NI	Z. i Ni
	Apr-98	,	NI
			NI
	Jul-98		
VW-58-08	Oct-98	0	28
	Feb-99	• • • • • • • • • • • • • • • • • • • •	18.9
	Apr-99	0	3.9
	Aug-99	0	3.3
	Oct-99		5
	Feb-98	. <u>N</u>	. NI
	Apr-98	NI	NI
	Jul-98	NI NI	NI
VW-58-19	Oct-98	. 0	7
	Feb-99	0	31.4
	Apr-99	0	4.6
	Aug-99	,	4.0
	Oct-99		5
	Feb-98	NI	NI NI
	Apr-98	NI	NI
	Jul-98	NI	NI
VW-58-29	Oct-98	0	12
V V 30-29	Feb-99	0	27.7
	Apr-99	0	4.2
	Aug-99	0	3.5
	Oct-99	0	4.7
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
VW-59-07	Oct-98	 	23
	Feb-99	† · · · · · · · · · · · · · · · · · · ·	20.6
	Apr-99		10.2
	Aug-99		7.2
	Oct-99		0.8

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	0.6
	Apr-00	0	1.2
	Aug-00	0	0.9
VW 57.40	Nov-00	0	0.8
VW-57-18	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01	i	
	Jan-00	0	0.6
	Apr-00	0	1.5
	Aug-00	0	0.8
==	Nov-00	0	0.8
VW-57-26	Feb-01	1	
	Apr-01		
	Jul-01		
	Oct-01		
-	Jan-00	0	2.5
	Apr-00	•	6.5
	Aug-00	0	2.7
	Nov-00	0	1.7
VW-58-08	Feb-01	. <u>Y</u>	
	Apr-01		
	Jul-01		
	Oct-01		
	i		21
	Jan-00	. <u>0</u>	2.1
1	Apr-00		4.5
	Aug-00	0	2.7
VW-58-19	Nov-00	0	2.2
	Feb-01	·	:
	Apr-01		
	Jul-01		:
	Oct-01		·
	Jan-00	0	2.9
	Apr-00	0	3.7
	Aug-00	0	2.3
VW-58-29	Nov-00	0	2.0
	Feb-01		
	Apr-01		<u> </u>
	Jul-01	<u> </u>	
	Oct-01		
	Jan-00	0	2.4
	Apr-00		3.1
	Aug-00	0	1.3
VW-59-07	Nov-00	0	1.7
- '	Feb-01		
	Apr-01		
	Jul-01		ļ
<u> </u>	Oct-01		

Well ID	Date	Methane (%	VOC (ppm)
VW-59-17	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
	Oct-98	0	8
	Feb-99	0	8.7
	Apr-99	0.1	4.9
	Aug-99	0.4	3.2
	Oct-99	0	0.7
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
	Oct-98	0	4
VW-59-27	Feb-99	0	11.8
	Apr-99	0	7.9
	Aug-99	0.3	3.3
	Oct-99	0	0.5
	Feb-98	NI	NI
	Apr-98	. NI	NI
	Jul-98	, NI	· NI
	Oct-98	0	24
VW-60-10	Feb-99	•	5.8
	Apr-99	. 0	0.8
		. VM	NM
	Aug-99 Oct-99	0	1 1
}			
	Feb-98	NI NI	NI NI
	Apr-98	NI NI	, NI
	Jul-98	NI O	NI 0.7
VW-60-18	Oct-98	. 0	37
	Feb-99		1.6
	Apr-99	0	0.4
	Aug-99	NM	NM
	Oct-99	0	0.7
	Feb-98	NI	Ni
	Apr-98	NI .	Ni
	Jul-98	NI	NI
VW-60-28	Oct-98	0	38
	Feb-99	0	1.0
	Apr-99	·	1.2
	Aug-99	NM	NM
	Oct-99	0	1.1
	Feb-98	NI	NI
	Apr-98	NI.	Ni
	Jul-98	NI	NI
VW-61-08	Oct-98	0	0
*** 01-08	Feb-99	0	64
	Apr-99	0	3.8
	Aug-99	0	3.7
	Oct-99	0	0.4

Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	. 0	1.6
	Apr-00	0	2.3
ĺ	Aug-00	0	1.5
	Nov-00	0	1.7
VW-59-17	Feb-01		
	Apr-01		· · · · · · · · · · · · · · · · · · ·
	Jul-01		
	Oct-01		•
	Jan-00	0	2.9
	Apr-00	0	3.1
:	Aug-00	0	1.4
	Nov-00		1.4
VW-59-27	Feb-01	ļ V	
1	Apr-01		
	Jul-01		
	Oct-01		1
	Jan-00	0	0.7
[Apr-00	. 0	0.7
	Aug-00	. 0	0.5
	Nov-00	. 0	0.5
VW-60-10	Feb-01	. 0	0.5
	Apr-01	=	
	Jul-01	L	
	Oct-01		
	Jan-00	0	0.4
		0	
	Apr-00 Aug-00	. 0	1.0 0.4
	Nov-00	0	
VW-60-18	Feb-01		0.5
	Apr-01		4
	Jul-01	i	· • -
 	Oct-01	•	
			0.4
1	Jan-00	0	0.4
	Apr-00	0	0.7
ŀ	Aug-00		0.3
VW-60-28	Nov-00	0	0.3
	Feb-01		
]	Apr-01	ļ	
	Jul-01	<u> </u>	
	Oct-01		2 0
	Jan-00	0	3.3
1	Apr-00	0	1.6
	Aug-00	0	NF 2.6
VW-61-08	Nov-00	0	2.6
	Feb-01		
ĺ	Apr-01		
l	Jul-01	ļ	
	Oct-01	!	

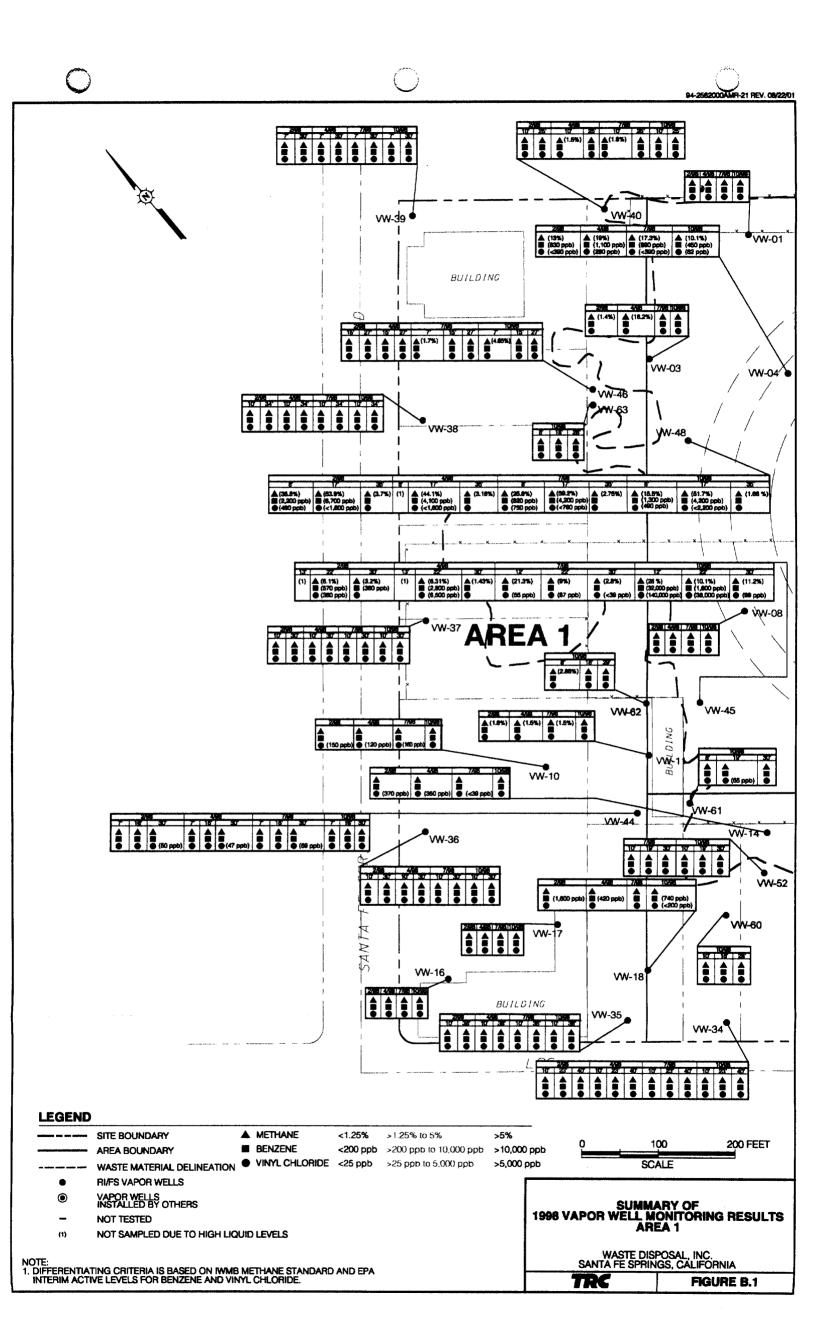
Well ID	Date	Methane (%)	VOC (ppm)
VW-61- 1 9	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
	Oct-98	0	0.4
	Feb-99	0	37
	Apr-99	0	2.9
	Aug-99	†	3.7
	Oct-99	0	0.3
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98		NI
	Oct-98	•	NM
VW-61-30	Feb-99		51
	Apr-99	0	3.3
	Aug-99		2.9
	Oct-99	0	0.4
	Feb-98	NI	NI
	Apr-98		NI
	Jul-98		NI
	Oct-98		12
VW-62-08		2.5	0
	Feb-99	e de la companya del companya de la companya del companya de la co	
	Apr-99	3.1	1.8
	Aug-99		0.8
	Oct-99	5.8	0.8
	Feb-98	NI NI	. NI
	Apr-98	NI	. NI
	Jul-98	NI	, NI
VW-62-18	Oct-98	0	, NM
	Feb-99		2.5
	Apr-99		7.9
	Aug-99	the state of the s	3.7
	Oct-99	fra the second second second	1.5
	Feb-98	NI	NI
	Apr-98	+···	. NI
	Jul-98	+	NI
VW-62-29	Oct-98	0.2	NM
*** 02 20	Feb-99	. 0	2.9
	Apr-99	0.1	7.8
	Aug-99	0.2	2.5
	Jan-04	0.4	1.3
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
V/M 60 00	Oct-98	0.3	23
VW-63-08	Feb-99	1	13.1
	Apr-99	1	6.6
	Aug-99		2.1
	Oct-99		0.7

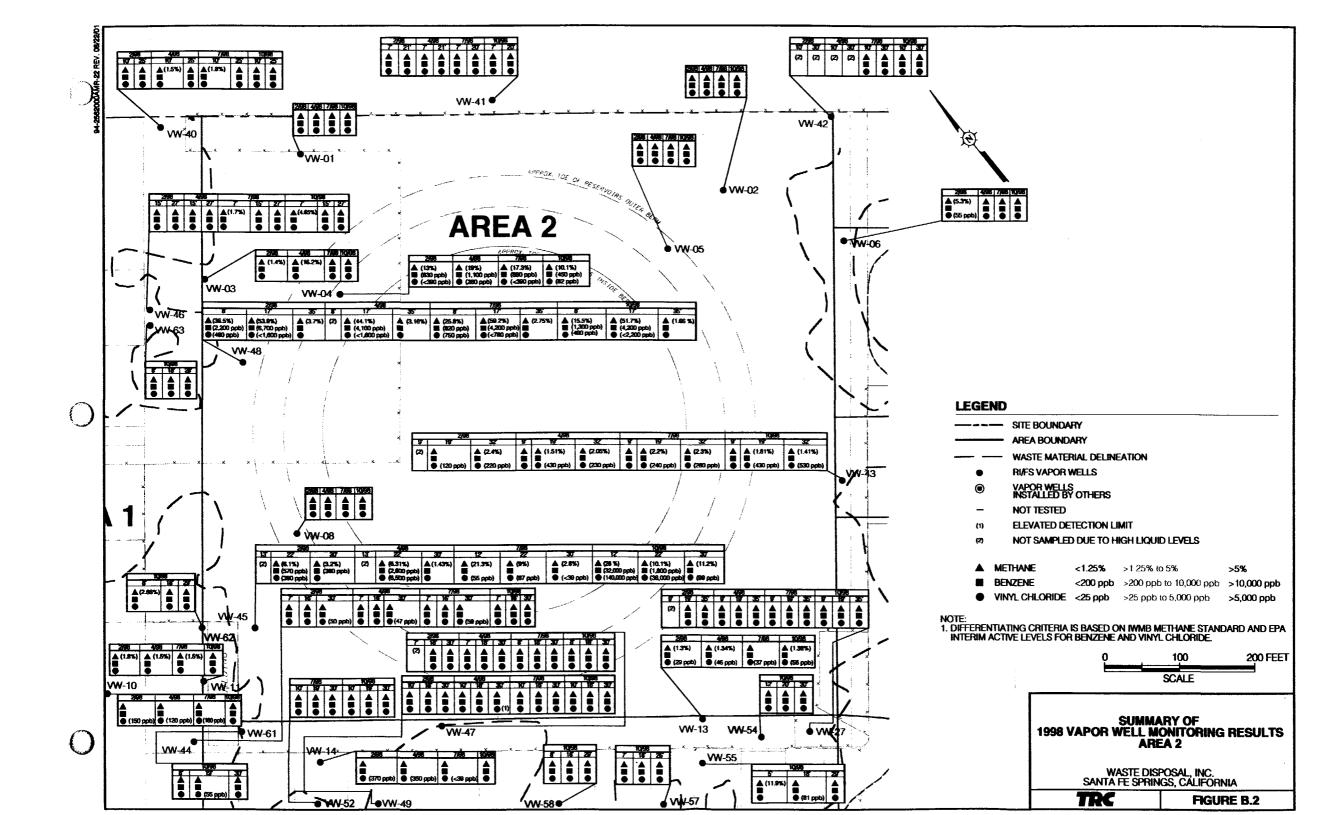
Well ID	Date	Methane (%)	VOC (ppm)
	Jan-00	0	2.8
VW-61-19	Apr-00	0	4.4
	Aug-00	0	NF
	Nov-00	0	2.4
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	0	2.5
	Apr-00	0	1.0
	Aug-00	0	NF
	Nov-00	0	2.0
VW-61-30	Feb-01	<u>. </u>	
!	Apr-01	ļ	1
	Jul-01		
}	Oct-01		
	Jan-00	3.2	1.3
	Apr-00	5.7	3.2
	Aug-00	8.0	1.0
	Nov-00	2.6	0.7
VW-62-08	Feb-01		<u> </u>
	Apr-01		
	Jul-01		
	Oct-01		: :
	Jan-00	0.5	2.1
	Apr-00		7.1
	Aug-00	0.5	3.2
	Nov-00		1.3
VW-62-18	Feb-01		i
	Apr-01		
	Jul-01	: 	
	Oct-01	 	
	Jan-00	0.4	17
	Apr-00		1.7 2.0
		0.6	1.5
	Aug-00 Nov-00	<u> </u>	0.9
VW-62-29	Feb-01	0.1	0.8
	Apr-01	 	
	Jul-01		
	Oct-01		
ļ			NF
	Jan-00 Apr-00	0	
1	Apr-00 Aug-00	0.5	2.8 1.6
	Nov-00	0.5	2.0
VW-63-08		<u> </u>	Z.U
	Feb-01 Apr-01		
	Jul-01		
1			
	Oct-01	l .	i

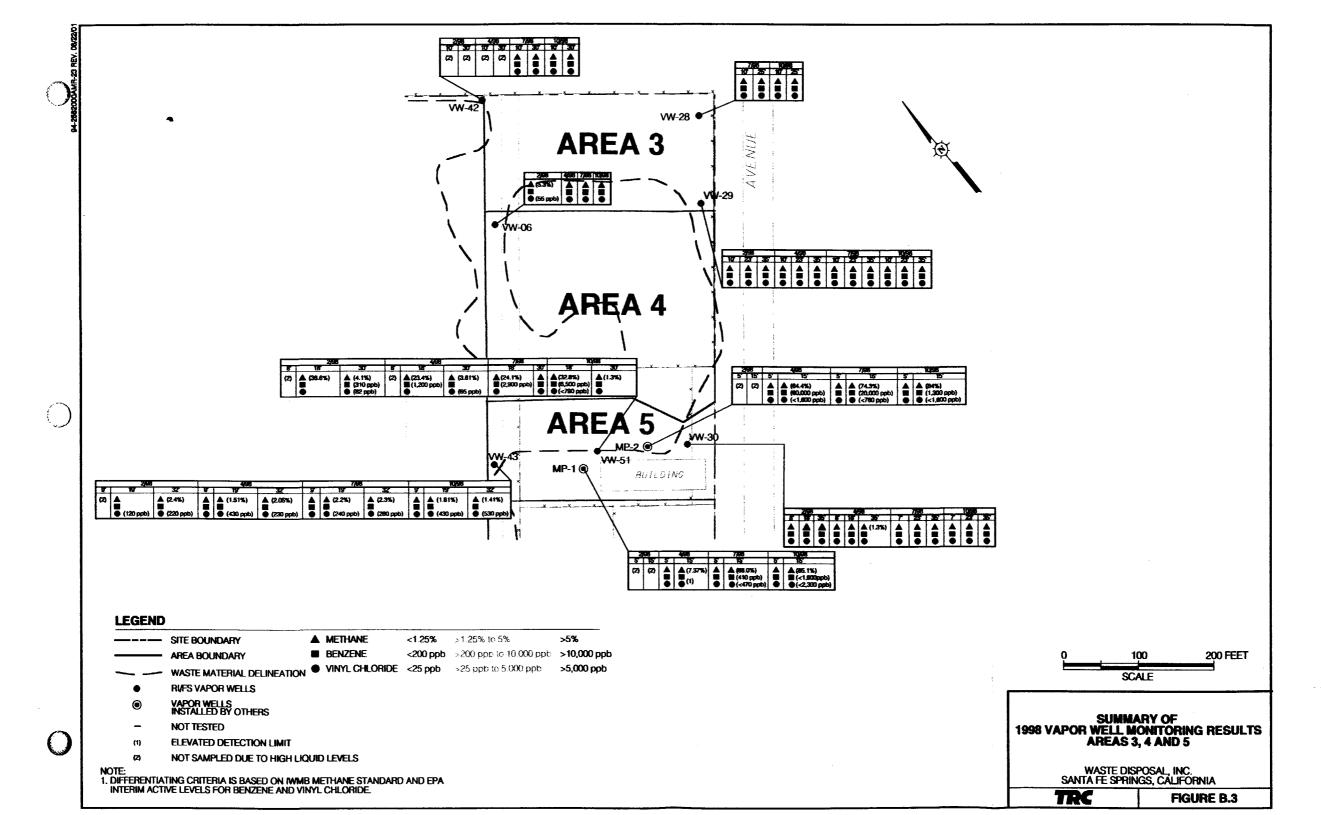
Well ID	Date	Methane (%) VOC (ppm)
VW-63-18	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI
	Oct-98	0	19
	Feb-99	0	19.3
	Apr-99	0	6.1
	Aug-99	0	1.3
	Oct-99	0	0.4
	Feb-98	NI	NI
	Apr-98	NI	NI
	Jul-98	NI	NI NI
	Oct-98	0	12
VW-63-28	Feb-99	0	17.5
	Apr-99	0	5.9
	Aug-99	0	1.6
		0	•
	Oct-99		0.4
	Feb-98	NM	NM
	Apr-98	0	10.2
	Jul-98	0	13.2
MP-1-05	Oct-98	0	10
	Feb-99		14.8
	Apr-99	O	5.2
	Aug-99	0	3.4
	Oct-99	0	2.3
	Feb-98	5.3	24.0
	Apr-98	NM	NM
	Jul-98	0	21.1
MP-1-15	Oct-98	NM	NM
1415-1-13	Feb-99	NM	NM
	Apr-99	NM	NM
	Aug-99	NM	NM
	Oct-99	NM	NM
	Feb-98	NM	NM
	Apr-98	0	17
	Jul-98	0	37.5
	Oct-98	0	15
MP-2-05	Feb-99	0	1.4
	Apr-99	0	5.4
	Aug-99	0	2.6
	Oct-99	0	4
	Feb-98	7.3	19.7
	Apr-98	NM	NM
	Jul-98	11.8	81
	Oct-98	NM	NM
MP-2-15		NM	·
	Feb-99		NM
	Apr-99	NM	NM
	Aug-99	NM	NM
	Oct-99	NM	NM

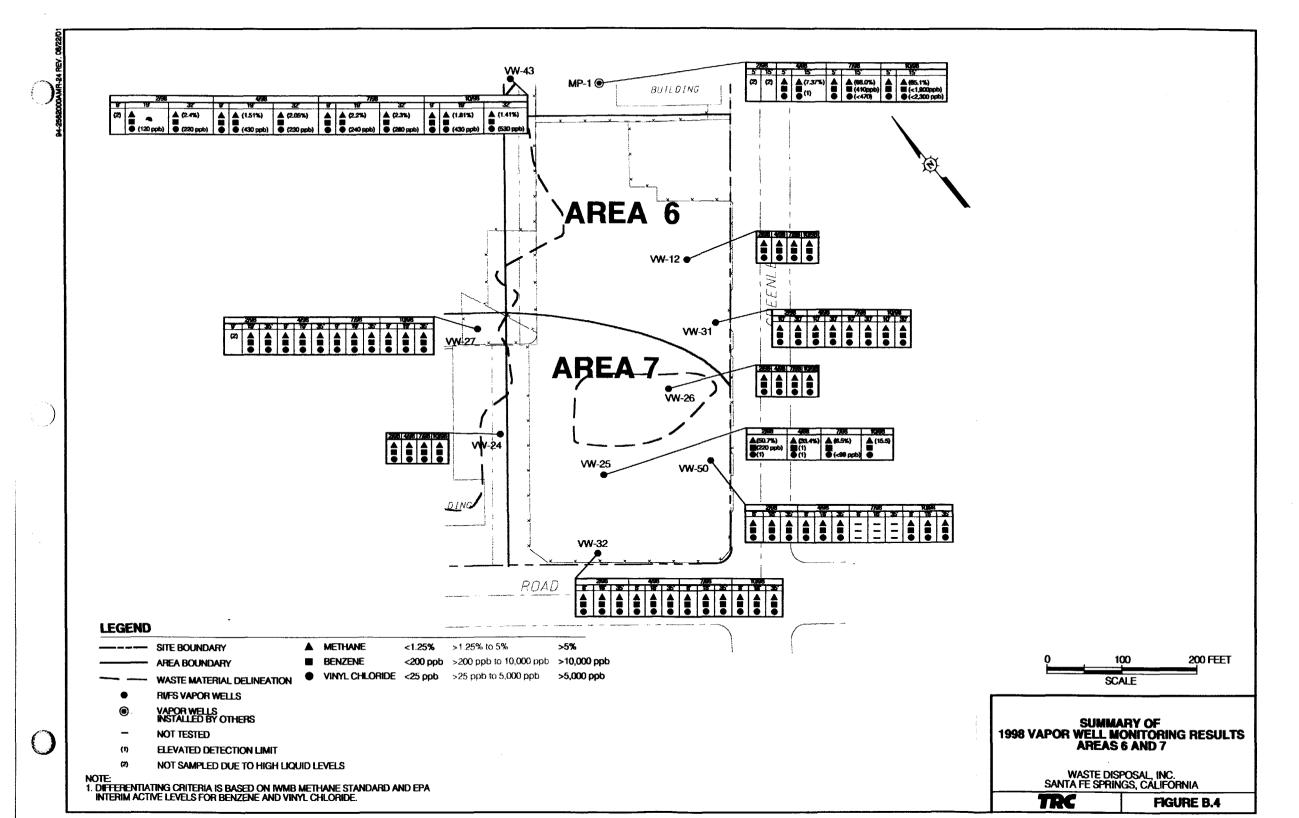
Mall ID	Data	14-4b (0/)	
Well ID		Methane (%)	
	Jan-00	0	NF.
	Apr-00	0	3.0
	Aug-00	0	1.0
VW-63-18	Nov-00	0	2.1
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	<u>0</u>	NF
	Apr-00		1.5
	Aug-00	0	0.3
VW-63-28	Nov-00	0	2.1
	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
-	Jan-00	0	5.4
	Apr-00	0	11.1
	Aug-00	0	3.6
MP-1-05	Nov-00	0	1.8
	Feb-01	:	. [
	Apr-01		[
	Jul-01		
	Oct-01		
	Jan-00	NM	NM _
	Apr-00	NM	NM
	Aug-00	NM	NM
MP-1-15	Nov-00		
	Feb-01		.
	Apr-01	1 1 1	·
	Jul-01	_	
	Oct-01		
	Jan-00	0	2.9
	Apr-00	0	9.2
	Aug-00	0	2.3
MP-2-05	Nov-00	0	1.2
2 00	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		
	Jan-00	NM	NM
	Apr-00	NM	NM
	Aug-00	NM	NM
MP-2-15	Nov-00	NM	NM
0	Feb-01		
	Apr-01		
	Jul-01		
	Oct-01		

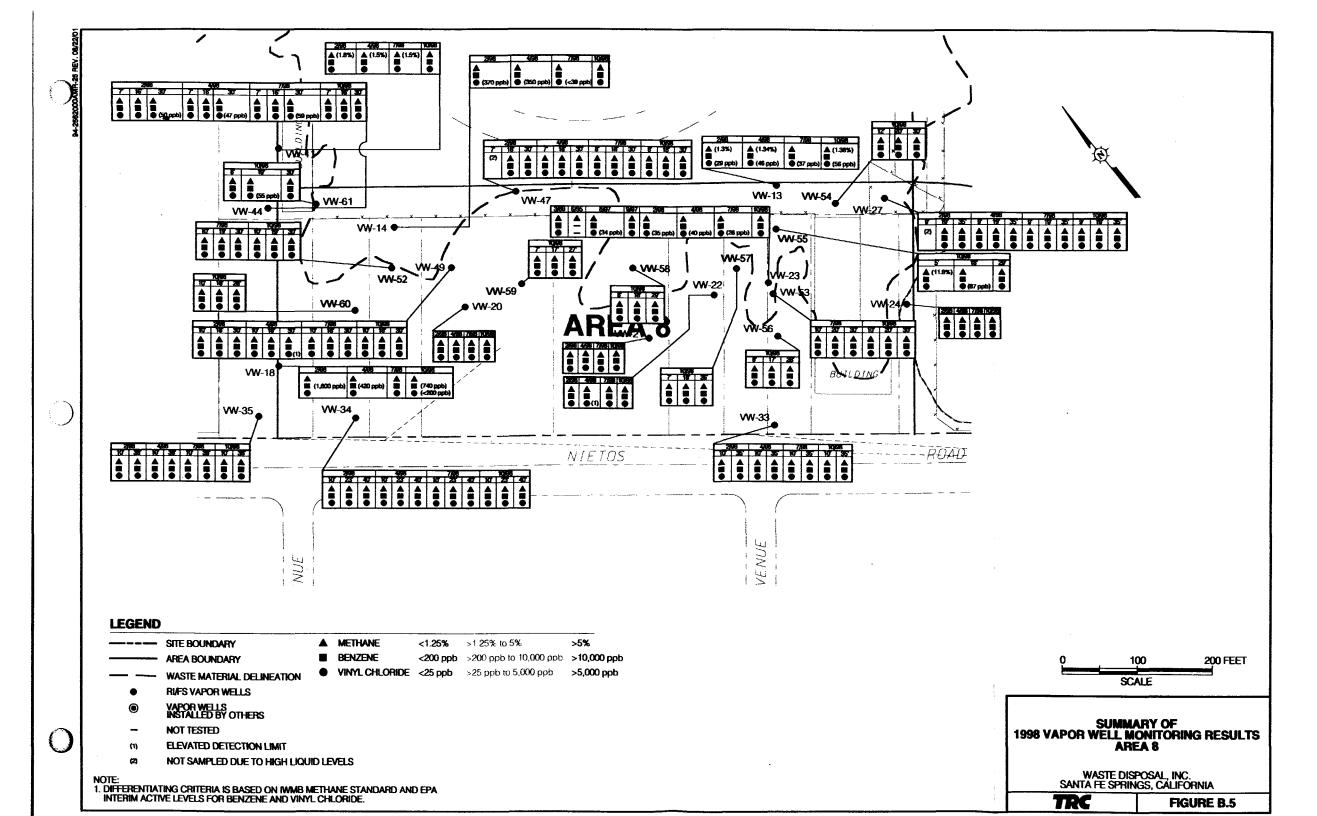
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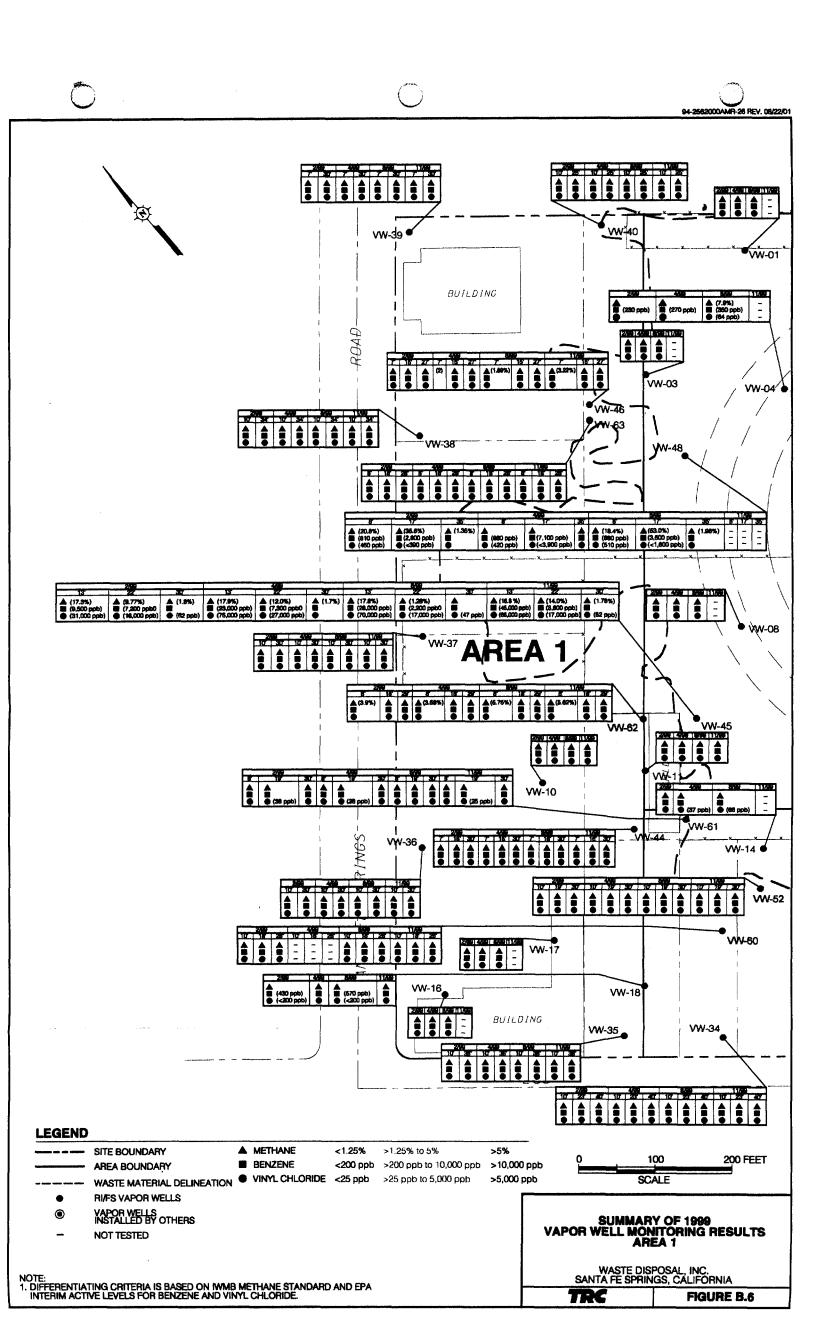


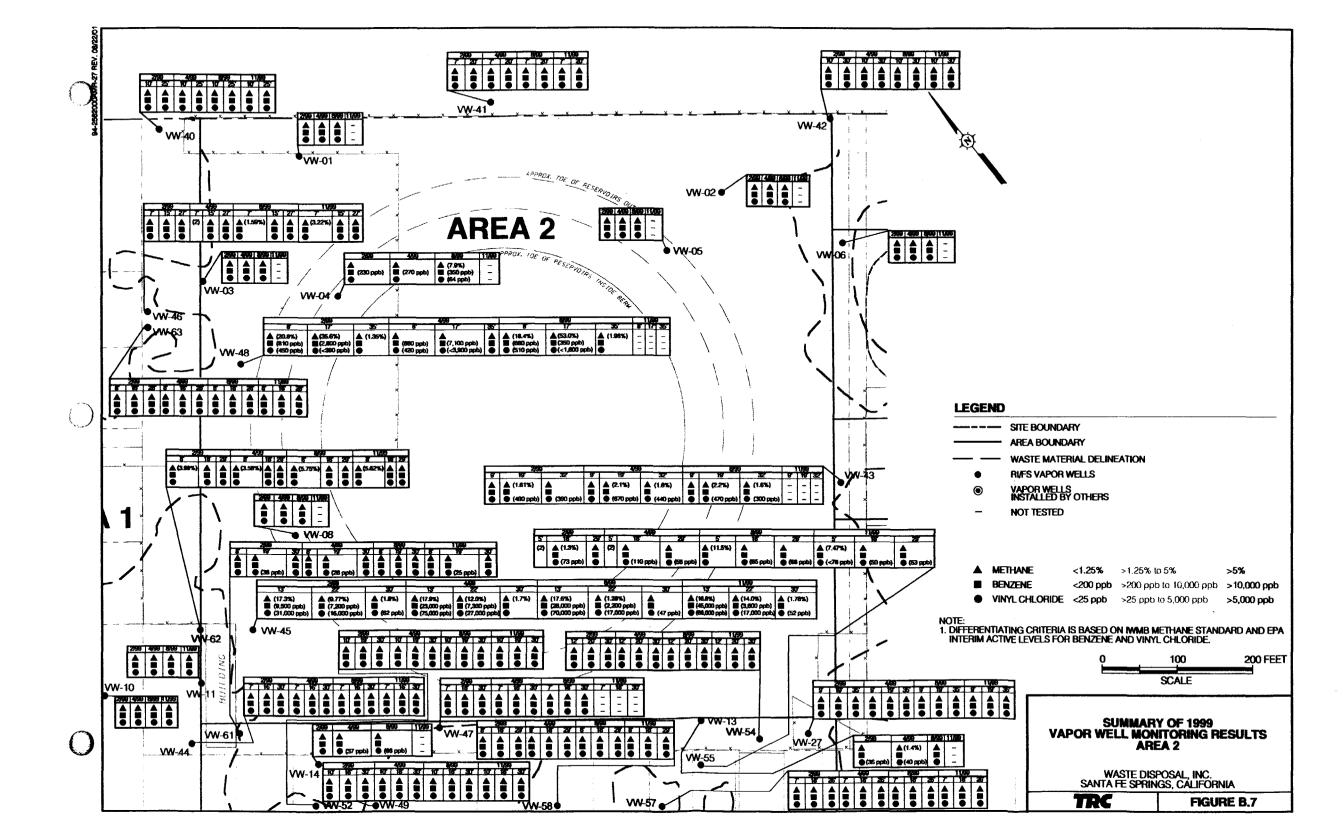


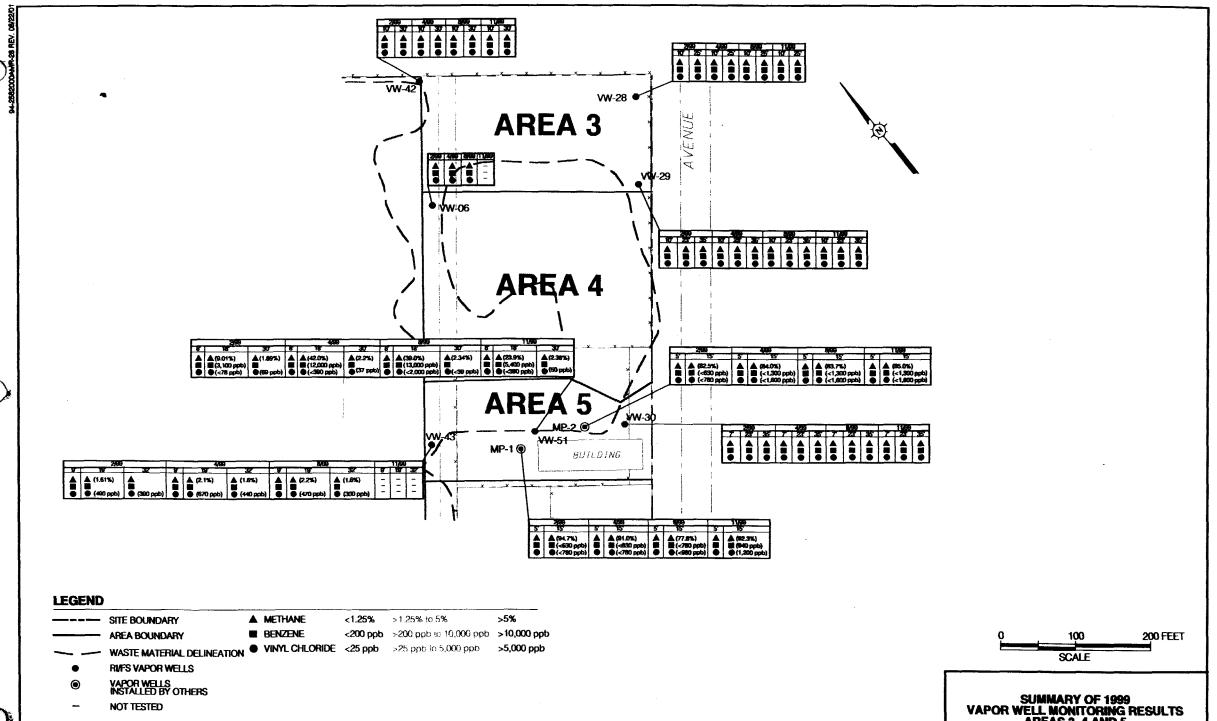












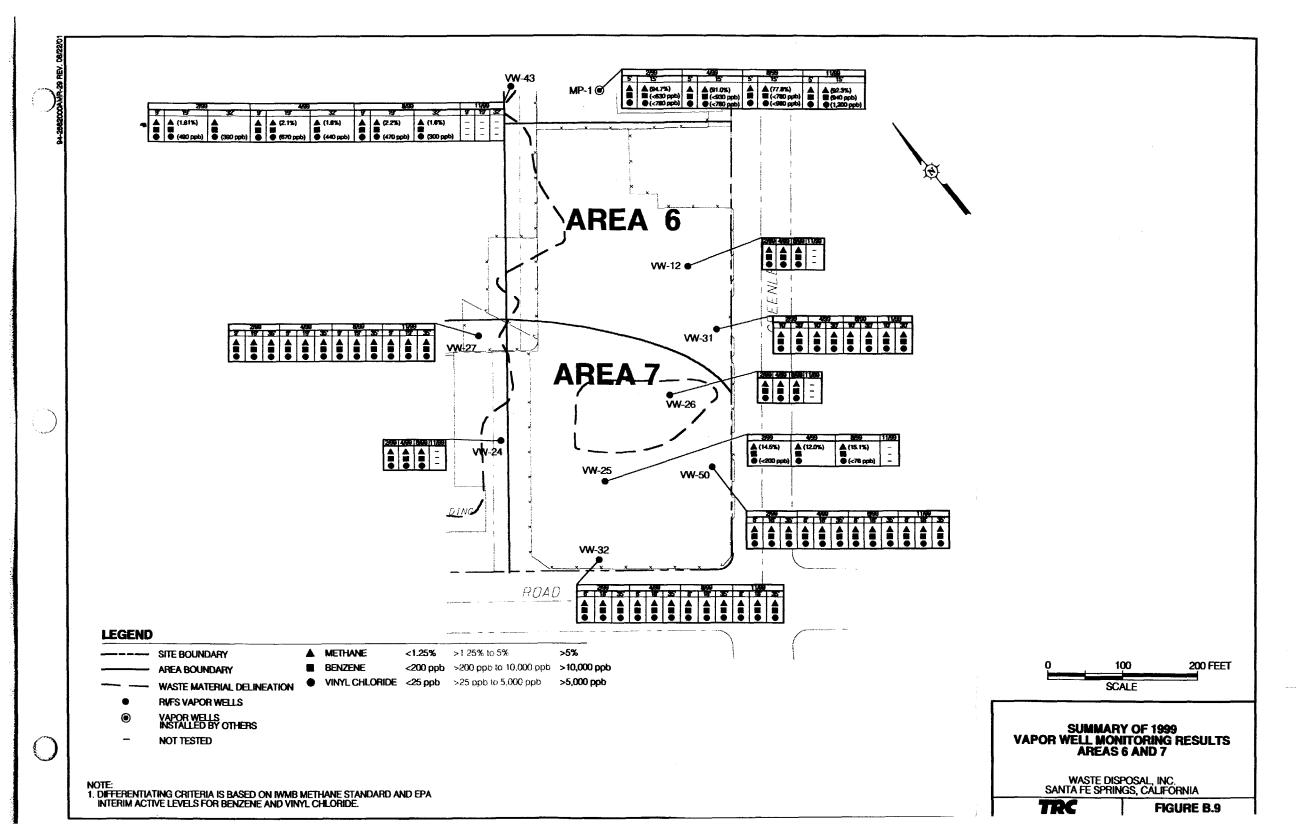
1. DIFFERENTIATING CRITERIA IS BASED ON IWMB METHANE STANDARD AND EPA INTERIM ACTIVE LEVELS FOR BENZENE AND VINYL CHLORIDE.

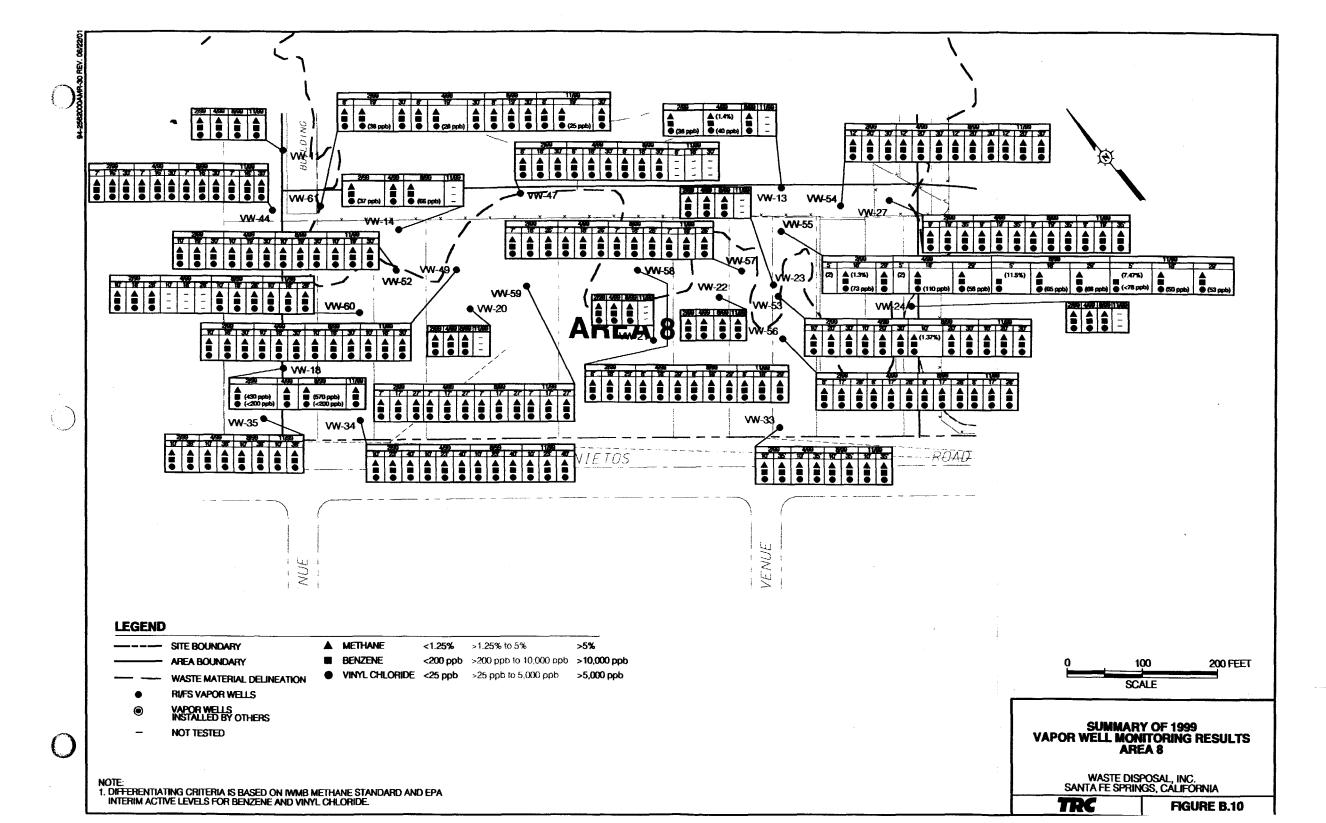
AREAS 3, 4 AND 5

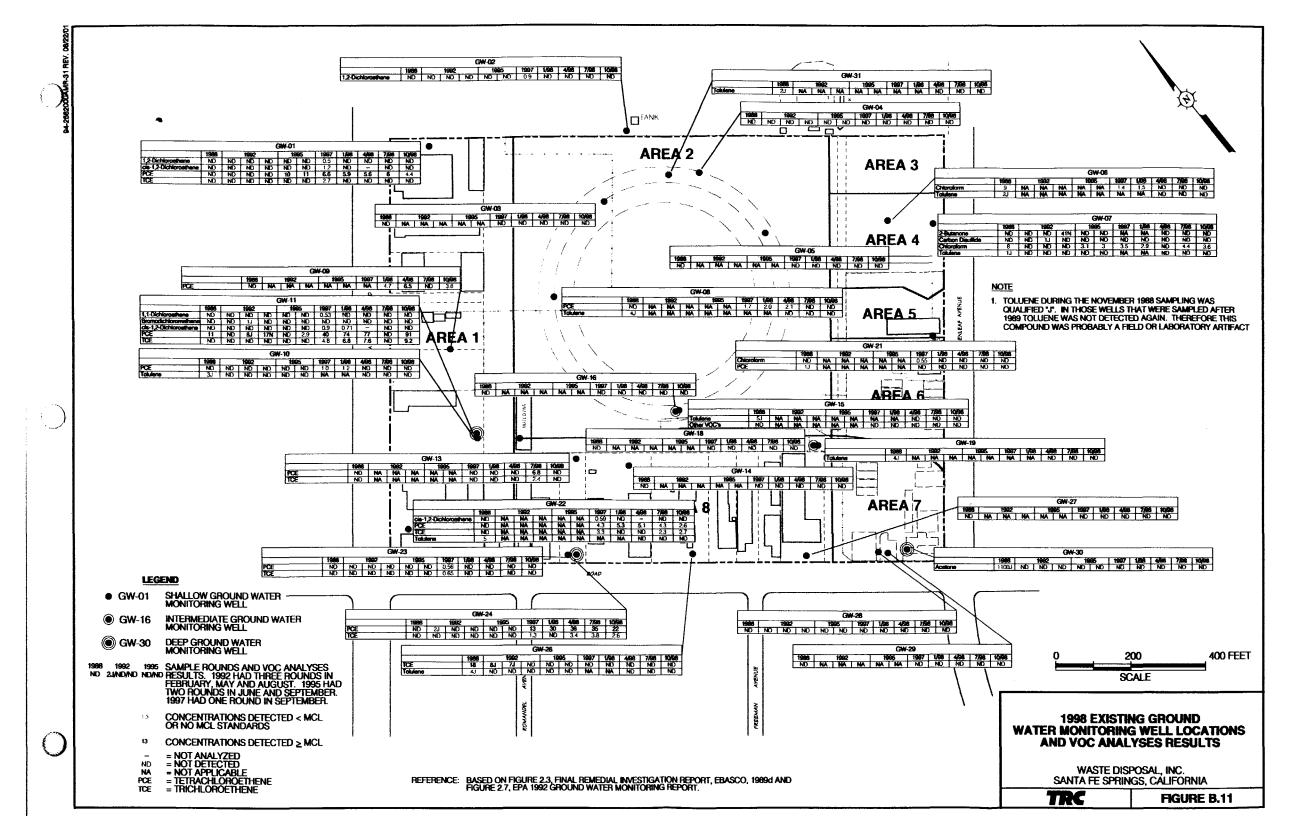
WASTE DISPOSAL, INC. SANTA FE SPRINGS, CALIFORNIA

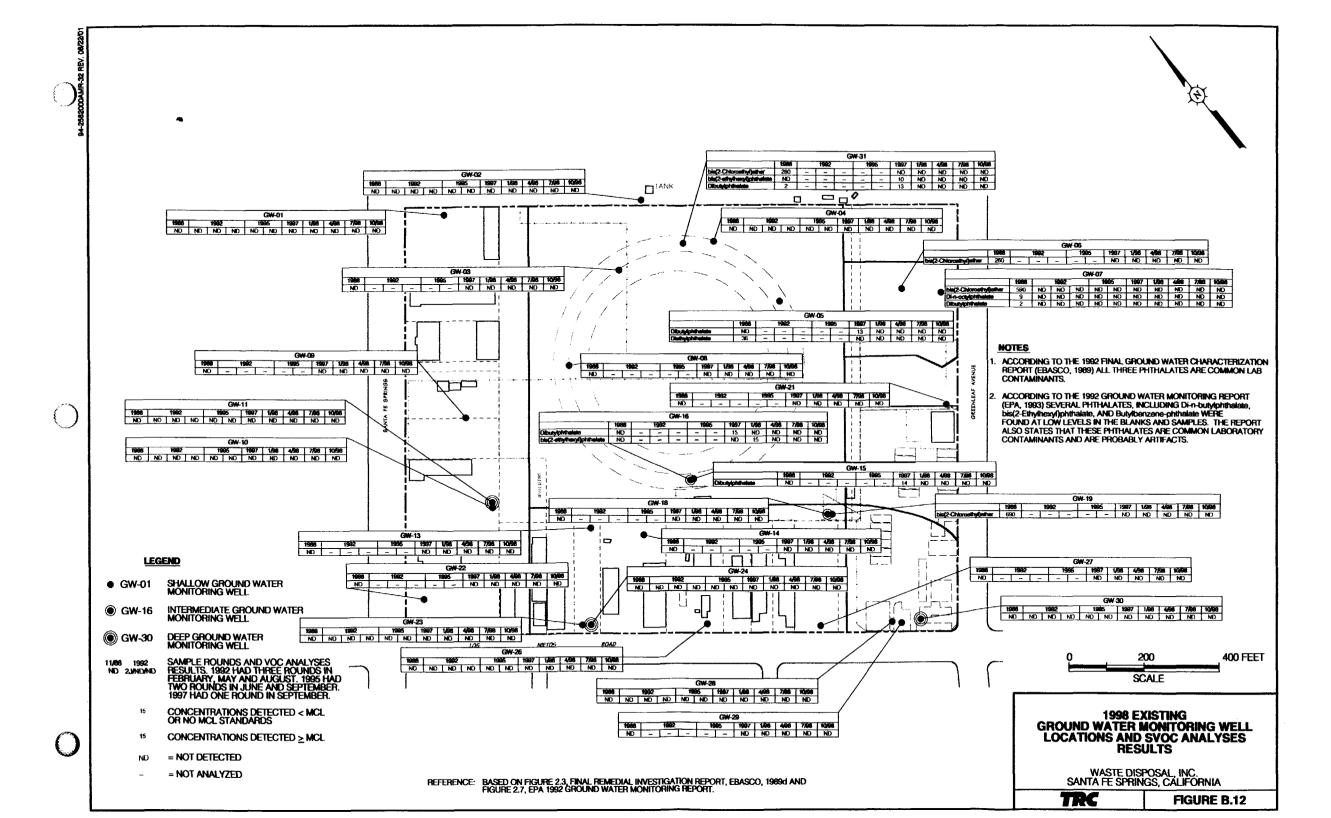
TRC

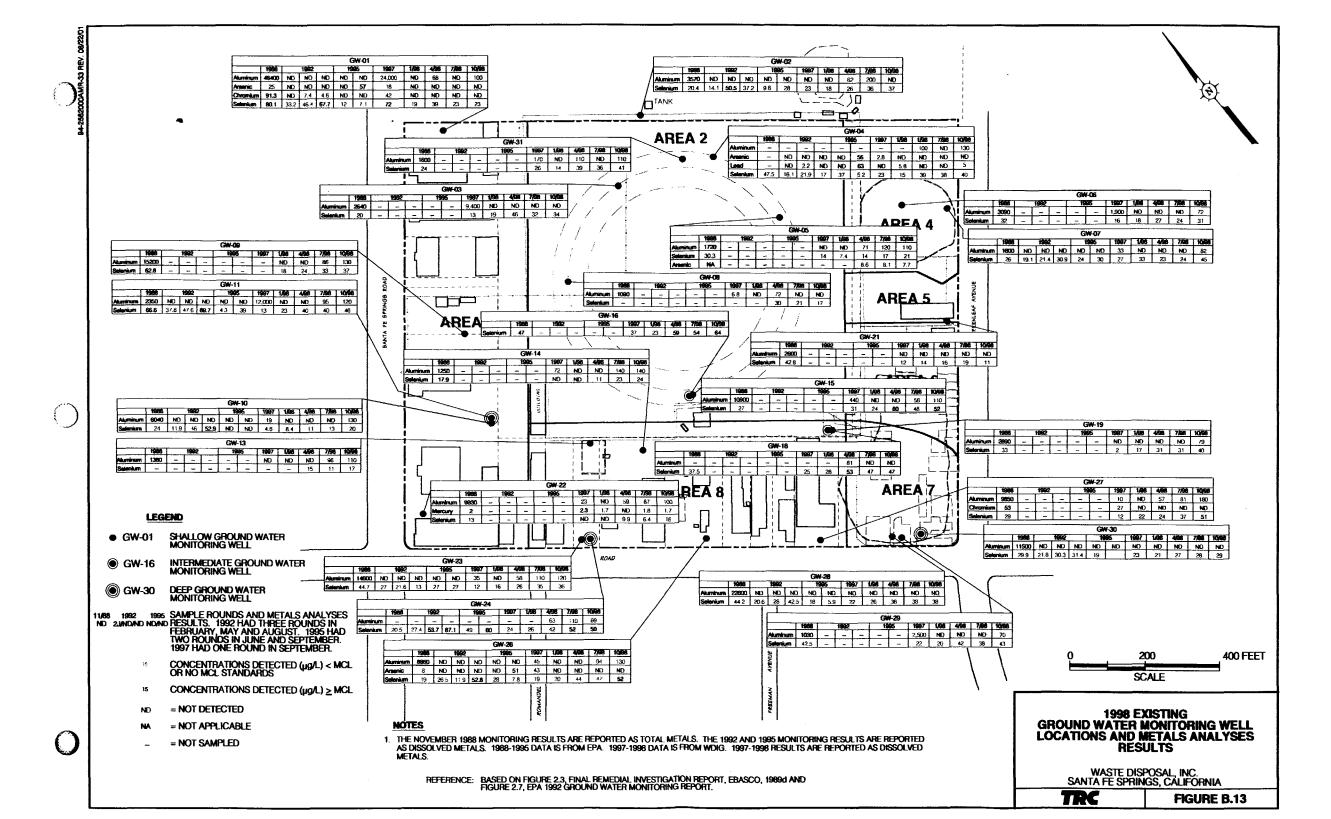
FIGURE B.8

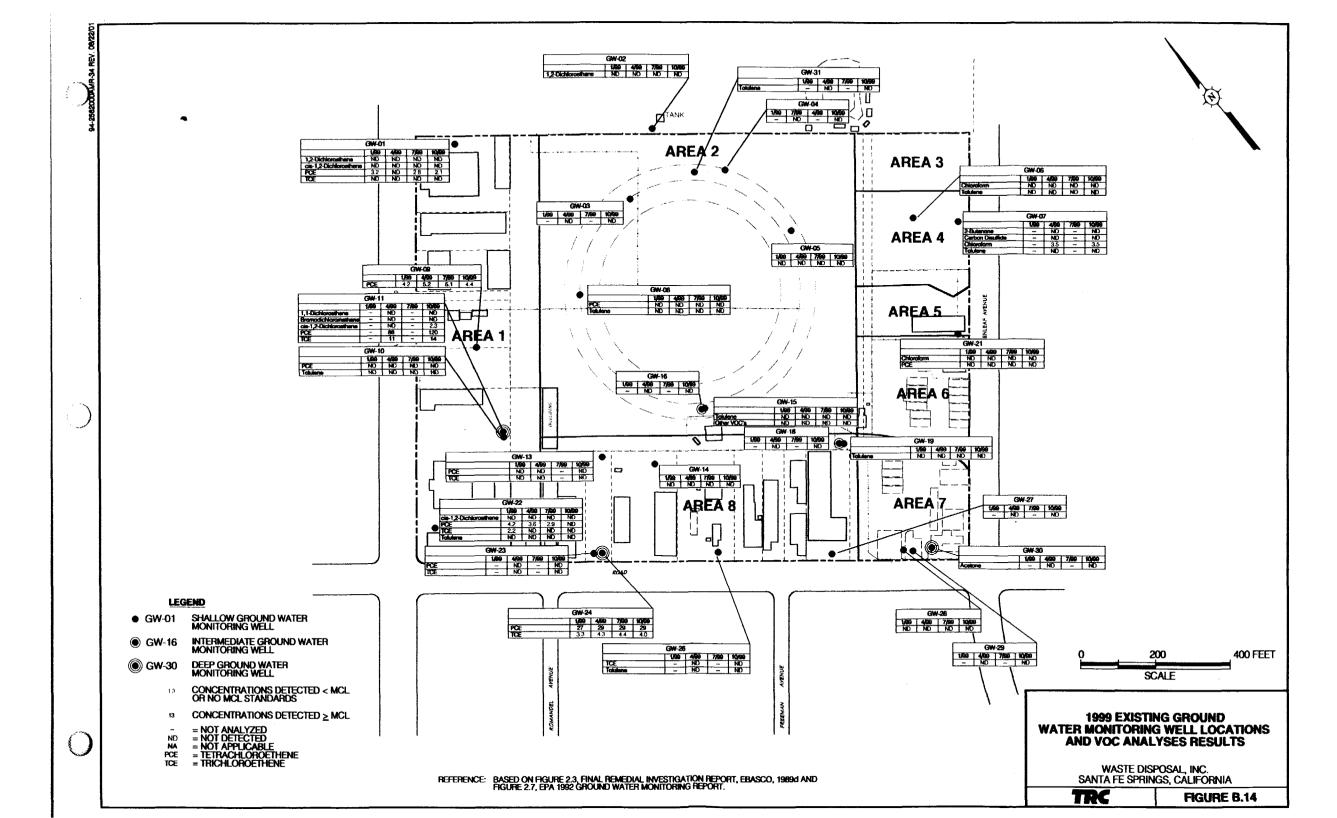


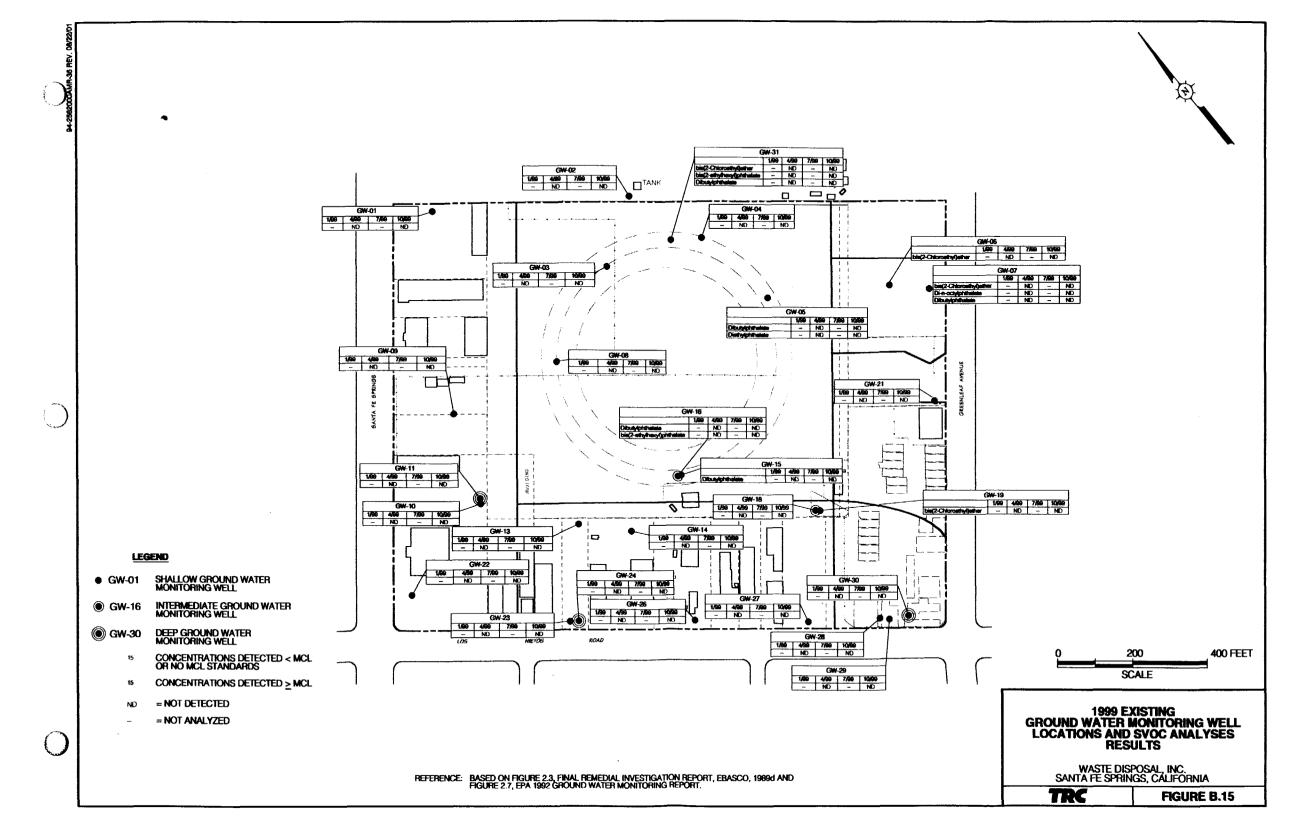


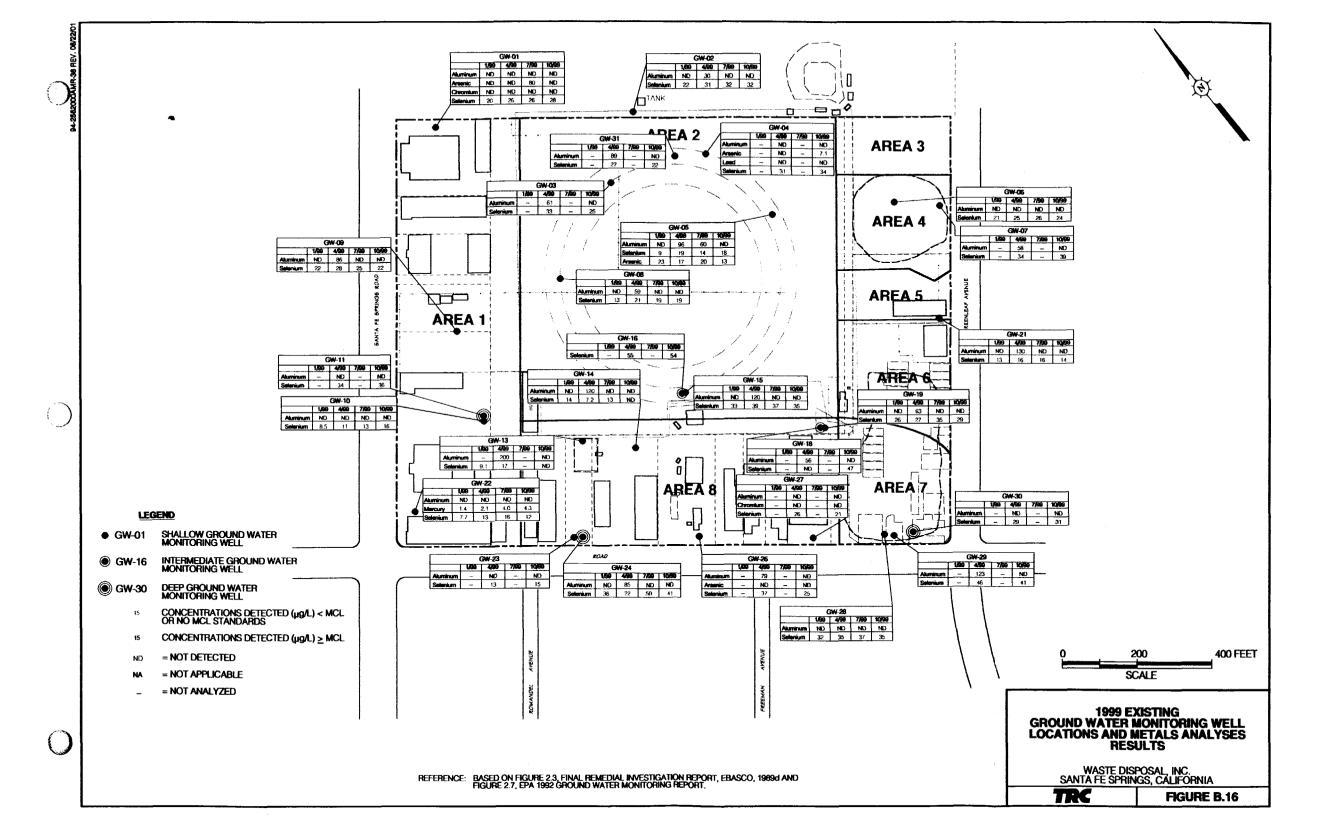


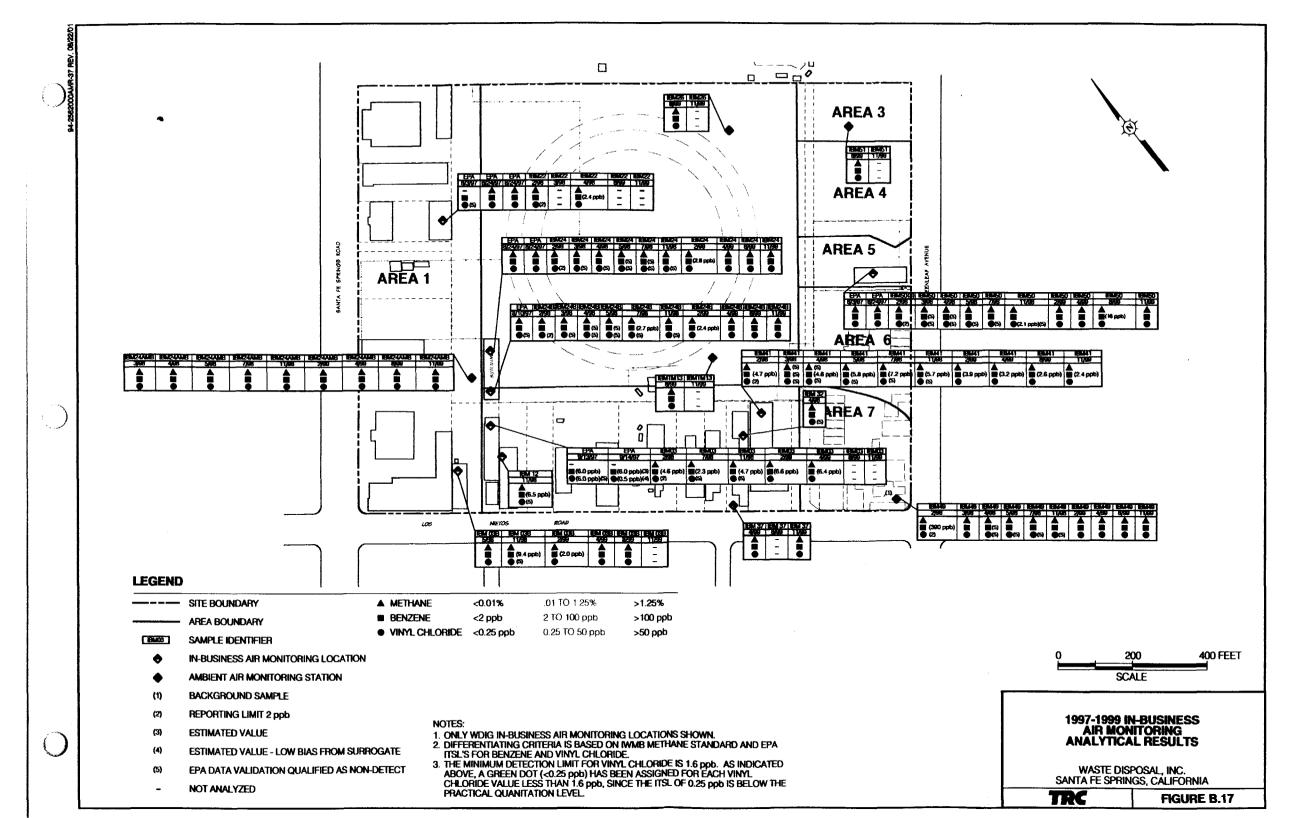












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